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ABSTRACT

This curriculum guide can be used by secondary and postsecondary agriculture, technology, and marketing instructors to decide what and how to teach about agricultural business organization and management, especially in Iowa. The guide consists of five instructional units: (1) agribusiness organization and management; (2) livestock sales and service; (3) crop sales and service; (4) agricultural equipment sales and service; and (5) horticultural sales and service. Each unit provides instructional plans that include the technical information that should be taught. Each instructional plan includes the following elements: a problem to be studied; interest approach; study questions; learner needs, basic skills, and thinking skills to be stressed; student learning activities; conclusions to be drawn; references; and supplemental teaching materials and activities. The supplemental teaching materials include transparency masters, activities, and information sheets. (KC)

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AGRIBUSINESS MANAGEMENT AND OPERATION

Instructional Materials Developed for Iowa Agricultural Science, Technology and Marketing Teachers

Prepared by

Department of Agricultural Education
Iowa State University
Ames, Iowa

June, 1988

This Curriculum Development Project was funded by:

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FOREWARD

These instructional materials were developed for use by Iowa Agricultural Science, Technology, and Marketing teachers. The materials were designed to assist teachers in deciding "what to teach" and "how to teach" about agricultural business organization and management in Iowa. This notebook includes the following instructional units.

Agricultural Business Organization
Livestock Sales and Service
Crop Sales and Service
Agricultural Equipment Sales and Service
Horticultural Sales and Service

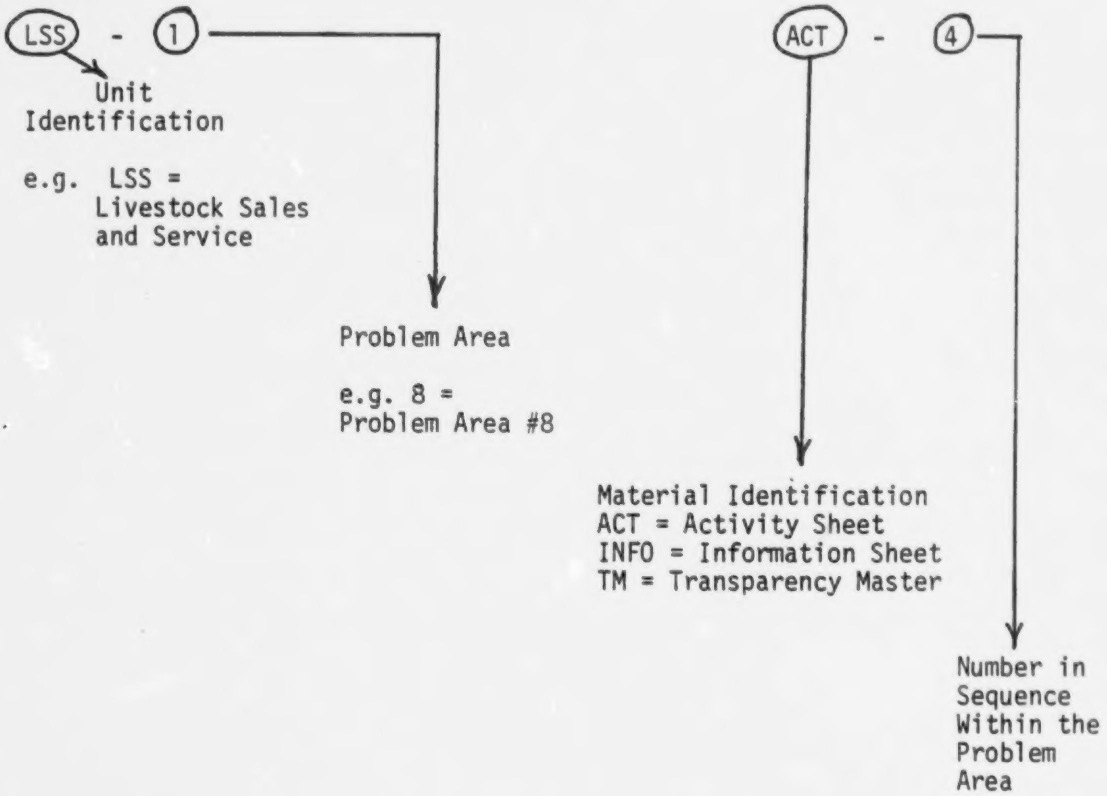
Each unit provides instructional plans that include the technical information that should be taught. Each instructional plan includes a problem to be studied; interest approach; study questions; learner needs, basic skills, and thinking skills to be stressed; student learning activities, conclusions to be drawn; references; and supplemental teaching materials and activities. The supplemental teaching materials include visual masters (TM), activities (ACT) and information (INFO) sheets.

Formal and informal instruction on the unit topics can be expanded for agricultural science, technology, and marketing students through leadership activites (FFA at the secondary school or PAS at the post-secondary school) and supervised occupational experience (SOE) programs.

Involvement of students in contest, proficiency awards and other leadership activities related to the instructional units can create student interest and enhance learning.

Coding and Format of Materials Included in this Guide

Coding


LSS - ①
Unit Identification
e.g. LSS = Livestock Sales and Service
Problem Area
e.g. 8 = Problem Area #8
ACT - ④
Material Identification
ACT = Activity Sheet
INFO = Information Sheet
TM = Transparency Master
Number in Sequence Within the Problem Area

Format of Problem Area

Each problem area consists of the following:

- Interest Approach
- Study Questions
- Learner Needs
- Basic Skills
- Thinking Skills
- Student Learning Activities
- Conclusion
- Evaluation
- References
- Supplemental Materials

Agribusiness Organization and Management

PROBLEM AREA 1

WHAT PERSONAL AND BUSINESS SKILLS ARE NEEDED TO MANAGE AN AGRIBUSINESS?

Contents

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Teaching Approach.......................................1

TM-1 Job Requirements of Managers....................12

TM-2 Types of Agribusiness Managers..................13

ACT-3 Requirements....................................14

ACT-4 Types of Managers...............................15

ACT-5 Personal Skills.................................16

PROBLEM 1: What personal and business skills are needed to manage an agribusiness?

INTEREST APPROACH:

The end of the year is coming and you have decided to have a meeting with your employees. Although everyone has done good work, profits for the business are down. If you cannot get the expenses down and sales up, you are afraid you may have to let someone go. The business has a relaxed, easy atmosphere and you are not sure how your employees will respond to any changes. On top of that, you have never held a meeting like this and you are not quite sure how to handle it. What would you say in the meeting? What would you expect your biggest problem to be?

STUDY QUESTIONS:

1. What are the job requirements of managers (entrepreneurs) of an agribusiness?
2. What are the different types of agribusiness managers and their options?
3. What personal skills are needed by an owner/manager to succeed in an agribusiness?
4. What management skills are needed by an owner/manager to succeed in agribusiness?
5. Where can one develop his/her agribusiness personal and business skills?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To prepare for entry into the job market and/or continuing education. Student Learning Activities #1 and 2.

For a personal philosophy of life. Student Learning Activity #5.

For human relations and communicative skills. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve the students' ability to express his/her opinion in a clear and concise manner. Student Learning Activity #5.

Strengthen the students' ability to follow written instructions. Student Learning Activity #5.

Improve the students' ability to write legibly. Student Learning Activity #1 and 3.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determining the strength of an argument. Student Learning Activity #4.

Determining the accuracy of a statement. Student Learning Activity #4.

Distinguishing between verifiable facts and value claims. Student Learning Activity #4.

STUDENT LEARNING ACTIVITIES:

1. Share TM-1 and 2 with the students, then have the students interview three agribusiness managers as to their job requirements and complete ACT-3. Have the students share what they learned with the rest of the class.

2. Using ACT-4, have the students survey businesses in the community to determine the type of managers of these businesses. Have the students share why they classified each manager as such. Have the teacher list the characteristics of a management style on the chalk board. Have the students brainstorm who in the community best fit the descriptions listed on the board based on their results obtained in ACT-4.

3. Have the students interview two employees to determine the personal skills required to work in that business and complete ACT-5. Have the students share what they learned with the rest of the class.

4. Ask the students to talk to their parents to find out what they like in a good agribusiness manager. In small groups have students compare their answers. Develop a list of the skills needed by a manager as perceived by a customer, their parents.

5. Provide students with guides from various colleges and vocational-technical schools. Have the students identify where they would go to further develop their skills as a manager.

CONCLUSION:

The job requirements of managers (entrepreneurs of an agribusiness.

An owner/manager (entrepreneur) is an individual who undertakes all the risks related to forming and operating a small agribusiness. This involves performing all business functions associated with a product or service and includes social responsibilities and legal requirements. Some of the job requirements include the following:

Ability to effectively handle marketing.

Ability to deal effectively with human relations.

Ability to promote and advertise the agribusiness.

Understand the manufacturing and service activities of an agribusiness.

Understand the supportive activities of an agribusiness such as communications, records, transactions, sales, and purchases.

The different types of agribusiness managers and their options.

Self-employed individual: Those people who perform all the work and keep all the profit. This includes all types of businesses. It can be full-time or part-time because no one else is involved.

Team builders: Those people who start a business and expand as fast as possible in order to be able to hire other employees. Most of the time, employees hired have needed expertise that the owner does not have.

Inventors: Those people with particular inventive abilities who design a better product and then create companies to develop, produce, and sell the item. High tech companies of this type are a new trend.

Pattern multipliers: Those people who take an idea someone else has already created and then creates his/her own business based on following another's model. Franchise operation or chain stores are a form of this approach.

Economy of scale exploiters: Those people who benefit from large volume sales by offering discount prices and operating with very low overhead.

Acquirees: Those people who take over a business started by another and use his/her own ideas to make it successful. This happens when there is a financial problem in the current operation. Fresh management may save the business.

Buy-sell artists: Those people who buy a company for the purpose of improving it before selling it for a profit.

Speculators: Those people who purchase a commodity and resell it for a profit. Real estate, art, antiques, and crops are typical speculator items.

Internal entrepreneurs: Those people who create new ideas and make them into a successful project within an existing business. Although they have neither the profit nor the personal financial risk of their own business, they need to use the same method of operation.

Personal skills are needed by an owner/manager to succeed in an agribusiness.

Adaptability: Adjusting easily to new situations.

Accept changes without complaint.

Cheerfully accept situations when first choice is not possible.

Learn new procedures and service information.

Co-operation: Working harmoniously with others toward some desired goal.

Follow the rules and regulations.

Do your part in group work.

Take part in extra-curricular activities.

Be flexible--consider the ideas of others.

Help others when possible.

Courtesy: Being polite and have good manners.

Show respect for others.

Speak with a pleasant voice.

Express your thanks for the time and effort of others.

Dependability: Completing duties assigned to you; doing what you say you will do.

Be punctual and regular in attendance.

Complete all assigned work on time.

Follow instructions.

Take only time allowed for lunch and breaks.

Enthusiasm: Being eager to help or to take part in some activity.

Be alert and friendly.

Show pride in your job.

Do more than your share when time permits.

Honesty: Being truthful in all things.

Respect property of others.

Give truthful information.

Be careful with money.

Keep promises.

Do not waste time.

Initiative: Doing things without being told.

Develop good work habits.

Learn to work on your own.

Use slack time to learn about your job.

Make helpful suggestions.

Accept additional responsibilities.

Knowledge or experience: Information and skills gained.

Include work background that will help you at the present job.

Utilize information gained from education.

Loyalty: Sticking up for, or supporting the cause.

Keeping confidences.

Show that you can be trusted.

Say good things about the firm for whom you work.

Patience: Taking the time to do things right the first time.

Try to understand the opinions of others.

Listen even though not interested.

Control emotions.

Quality: Measure of performance.

Complete the work.

Do your work to meet the required need.

Do your work well.

Quantity: Measure of amount.

Accomplish a reasonable amount of work.

Use time wisely.

Self-control: Being able to control your emotions.

Control your temper.

Show enthusiasm without becoming overbearing.

Accept constructive criticism.

Remain calm and poised.

Keep hurting remarks to youself.

Tact: Being able to say the right think at the right time.

Avoid saying things which may hurt feelings.

Do not contradict others.

Be diplomatic.

Management skills are needed by an owner/manager to succeed in an agribusiness.

Marketing activities:

Sales: Must have a general knowledge of sales and customer relations.

Distribution: Know where the products come from and where they go.

Promotion: Must be able to carry out an effective advertising campaign.

Manufacturing activities:

Design: Must have a general knowledge of products.

Engineering: Must have technical knowledge of the product.

Assembling: Must be able to trouble-shoot problems.

Servicing activities:

One must have the technical knowledge to service the product.

Supportive activities:

Communications

Money records

Money transactions

Sales

Purchases

Developing your agribusiness personal and business skills.

Job experience: Work history is a valuable educational resource.

Club activities: Volunteer activities are important as well. Examples: fund raising, promotion of club, and leadership skills.

Education: This is the most traditional training. Examples: business skills, communication, and bookkeeping.

Listening to friends: Examples: employee relations, financing, etc.

Family relations: How to get along with others; how to resolve a conflict.

Hobbies.

EVALUATION:

Upon completion of this lesson, students will be able to:

Define the job requirements of an agribusiness manager.

Define and explain what the business options of an agribusiness manager are.

Identify and explain what personal skills are needed by the agribusiness person.

Identify business skills needed by the agribusiness person.

Explain where one could acquire needed agribusiness skills.

REFERENCES:

Agricultural Business and Management, Iowa Curriculum Assistance System, College of Education, Iowa State University, Ames, Iowa.

Beyond a Dream, An Instructor's Guide for Small Business Exploration. The National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio.

JOB REQUIREMENTS OF MANAGERS:

HANDLE MARKETING

DEAL EFFECTIVELY WITH HUMAN RELATIONS

PROMOTE AND ADVERTISE BUSINESS

UNDERSTAND MANUFACTURING AND SERVICE ACTIVITIES

UNDERSTAND SUPPORT ACTIVITIES

TYPES OF AGRIBUSINESS MANAGERS

Self-employed individual

Team builder

Inventor

Pattern multiplier

Economy of scale exploiter

Buy-sell artist

Speculator

Internal entrepeneur

REQUIREMENTS

Provide each student with at least three sheets.

What are the requirements for your job as agribusiness manager?

TYPES OF MANAGERS

Names of Managers

1. Self-employed individual ______________________

____

2. Team builder ______________________

____

3. Inventors ______________________

____

4. Pattern multipliers ______________________

____

5. Acquirees ______________________

____

6. Buy-sell ______________________

____

7. Speculators ______________________

____

8. Internal entrepreneurs ______________________

____

PERSONAL SKILLS

Provide at least two sheets per student.

Name of Interviewer:______________________

Name of Business: ____

Name of Employee: ____

What are the personal skills you need for this job? (Give examples from class.)

PROBLEM AREA 2

WHAT SHOULD BE TAKEN INTO CONSIDERATION WHEN ORGANIZING AN AGRIBUSINESS?

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INFO-2 Advantages and Disadvantages of Types of Ownership....8

ACT-3 Type of Agribusiness Ownership........................9

ACT-4 Legal Forms.......................................10

TM-5 Money Flow in an Agribusiness is Monitored Through...11

ACT-6 Accounts Receivable...................................12

ACT-7 Accounts Payable.....................................13

ACT-8 Payroll Register.....................................14

TM-9 Basic Financial Planning Forms.......................15

TM-10 Farm Machinery Dealer Organizational Structure.......16

TM-11 Example of a Feed Manufacturing Plant Cooperative....17

PROBLEM 2: What should be taken into consideration when organizing an agribusiness?

INTEREST APPROACH:

Build a pyramid of blocks labeled with the different parts of an agricultural business. Ask the students what block can be pulled out with out effecting any of the rest, except the very top. Try pulling out the blocks they chose. Then explain that just as no block can be pulled without affecting the rest, it is the same in organization of an agribusiness. You can't pull or forget one part without affecting the entire business.

STUDY QUESTIONS:

1. What are the types of ownership in an agribusiness?
2. How is money flow maintained in an agribusiness?
3. What licenses, permits, and governmental regulations must an owner be aware of in organizing an agribusiness?
4. How does financial planning fit into the organization of an agribusiness?
5. What are the different structures of an agribusiness?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To prepare for entry into the job market and/or continuing education. Student Learning Activity #1, 2, and 3.

For independent thinking with less need for models. Student Learning Activity #2.

To accept one's role as a responsible citizen. Student Learning Activity #1, 2, and 3.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve the students' reading vocabulary. Student Learning Activity #2.

Improve the students' ability to take clear and concise notes of meetings. Student Learning Activity #2 and 3.

Strenghten the students' ability to explain clearly and sufficiently. Student Learning Activity #2.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determine the reliability of a claim or source. Student Learning Activity #3.

Distinguishing relevant from irrelevant information. Student Learning Activity #3.

Determining the accuracy of a statement. Student Learning Activity #1, 2 and 3.

STUDENT LEARNING ACTIVITIES:

1. Review and discuss the types of agribusiness ownership (TM-1) and the advantages and disadvantages of types of ownership presented on INFO-2. Working in pairs, have students list agricultural businesses in the community. Using ACT-3, assign each student a different business and have them visit the manager of the business to determine the type of ownership of that business. Be

sure all types of ownership are covered by the students business visits. When all visits are completed, discuss and compare types of ownership studied by each student group and develop a list of businesses studied classified by type of ownership.

2. Invite three or four managers of different local agricultural businesses (farm equipment, feed store, nursery, etc.) to speak as a panel sharing about the license and permits they must secure to operate their businesses. If possible, have panelists share copies of their business permits with class members. As panelists speak, have members complete ACT-4.

3. Review and discuss TM-5 (how money flow is maintained in an agribusiness). Have students complete ACT-6, 7, and 8.

4. Review and discuss the forms on TM-9 for basic financial planning in an agricultural business. As a class project, have students determine the viability of establishing an agribusiness in the community following the outline on TM-9.

5. Review and discuss TM-10 and 11. Have class members visit a local agribusiness and develop an organizational structure for that business based on conversations with the manager.

CONCLUSION:

Types of ownership of an agribusiness:

Sole proprietorship: Is an individually owned business. No other people or group are involved except one person. The individual uses his own capital and borrows money under his name to finance the business.

Partnership: This type of business may have one or many partners and different types of partners. The partnership each contributes to the business and jointly borrows capital.

Corporation: Is a legal entity and may be owned by one or more people. Each owner has a certain number of shares. This type of ownership limits the legal obligation of the individual, but is also extensively regulated.

Franchise: Is a type of business that sells its name to be used by the individual.

Keeping track of money in an agribusiness:

Daily Sales and Cash Summary: A daily sales summary is a record of sales for that day. A cash summary is a record of the amount of money in cash that comes in and is paid out.

Accounts Receivable Record: A record of money owned to the agribusiness.

Accounts Payable Record: A record of money the agribusiness owes.

Payroll Register: A record of what the agribusiness owes the employees.

Licences, permits, and governmental regulations must an owner be aware of in organizing an agribusiness:

Income Taxes: The amount owned by the business on net profits.

Property Taxes: Taxes owed on the property the agribusiness is located on.

Truck Licenses: The licenses that are part of the business expense for trucks to move interstate.

Workers Compensation: The amount paid by the business for unemployment, etc.

Social Security: The amount taken out of each check for retirement at 63 or 65.

Employment Taxes: All the taxes paid by employer, i.e., income tax, social security tax.

Business Licenses: Certain businesses require licenses for operation.

Fitting financial planning into the organization of an agribusiness:

There are several forms that should be used in determining the financial viability of a business. They are:

Estimated cost of starting your business.

Capital equipment list.

Beginning balance sheet.

Projected annual income statement.

Cash flow projection.

Monthly cash balance on hand.

Sources and applications of financing.

In order to successfully start an agribusiness, one must be aware of the potential profitability of the business. Can it meet the financial needs of your business?

The potential agribusiness person needs to be aware of need for start up capital both for the business and for family living until the business can generate enough capital.

The different structures of an agribusiness:

Organizational structure provides ways to communicate between management and workers. The structure also defines who is in position of authority and this helps keep an agribusiness operating efficiently.

EVALUATION:

Upon completion of this lesson, students will be able to:

List the four types of ownership of an agribusiness.

List the records which need to be kept to keep track of money.

List the licenses, permits, and governmental regulations that an owner must be aware of.

Explain why financial planning is important and list the forms that can aid in financial planning to the satisfaction of the instructor.

Explain the differences between the three organizational structures of an agribusiness.

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Beyond a Dream: an Instructor's Guide for Small Business Exploration. Bologh, Judy, Ashmore Catherine. The National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio. 1985.

Business Administration. Napier, D. Instructional Materials Laboratory, University of Missouri-Columbia.

Advanced Marketing, Planning for Entrepreneurship Teachers Resource Guide. Commonwealth of Virginia, Department of Education, Vocational and Adult Education, Richmond, Virginia. 1984.

Business Management Ownership. Lyon, Barbara. Oklahoma State Board of Vocational and Technical Education, Stillwater, Oklahoma. 1982.

TYPES OF AGRIBUSINESS OWNERSHIP

Sole Proprietorship

Partnership

Corporation

Franchise

ADVANTAGES AND DISADVANTAGES OF TYPES OF OWNERSHIP

Forms of Ownership	Advantages	Disadvantage
Sole Proprietorship	1. Low start-up costs 2. Greatest freedom from regulation 3. Owner in direct control 4. Minimal working capital requirements 5. Tax advantage to small owner 6. All profits to owner	1. Unlimited liability 2. Lack of continuity 3. Difficulty in raising
Partnership	1. Ease of formation 2. Low start-up costs 3. Additional sources of venture capital 4. Broader management base 5. Possible tax advantage 6. Limited outside regulation	1. Unlimited liability 2. Lack of continuity 3. Divided authority 4. Difficulty in raising additional capital 5. Difficulty in finding suitable partners
Corporation	1. Limited liability 2. Specialized management 3. Transferable ownership 4. Continuous existence 5. Legal entity 6. Possible tax advantage 7. Ease of raising capital	1. Close regulation 2. Most expensive form to organize 3. Charter restrictions 4. Extensive recordkeeping 5. Double taxation
Franchise	1. Smaller-than-usual capital investment 2. Less working capital than normally required 3. Prior public acceptance of product or service 4. Management assistance 5. Better-than-average profit margins	1. Possible high franchisor fees, supplies, and charges 2. Some loss of independence 3. Possible difficulties in cancelling contracts

SOURCE: Adapted from Going into Business for Yourself by Gary L. Kuebbeler (Columbus: Ohio Distributive Education Materials Lab, The Ohio State University, n.d.)

TYPE OF AGRIBUSINESS OWNERSHIP

You are to visit the business assigned to you to determine the type of ownership of that business. Complete the following information about the business after you have visited with the manger of the business:

Name of business: ______________________________________

Type of ownership: _____ Sole Proprietorship

_____ Partnership

_____ Corporation

_____ Franchise

Why was the business organized under this type of ownership?

What are the advantages of this type of ownership for this business?

What are the disadvantages of this type of ownership for the above business?

LEGAL FORMS

List below the types of business permits, licenses, and governmental regulations agricultural businesses need or follow:

Business	Permit, License, Etc.

Money Flow in an Agribusiness is Monitored Through:

Accounts receivable records

Accounts payable records

Payroll register

Accounts Receivable

The following were received as accounts receivable. This includes money that is owned to you. Record the following as an account receivable in the space provided below.

1/4 John Smith invoice#3456 for parts	$123.23
1/6 David Smith invoice # 3488 for parts	$ 54.25
1/8 John Deere Inc. Refund	$575.00
1/9 Bernard Jones invoive #3566	$657.50

Account Receivable

Date	Description	Debit	Credit

Accounts Payable

The following were received as accounts payable. This includes money that you owe to others. Record the following as an account payable in the space provided below.

1/3	IH Case invoice#1123 parts	$1,200.50
1/7	Benson Supply invoice # 3488 parts	$8,875.50
1/10	John Deere Inc.	$5,075.23
1/15	Appleton implement	$ 657.50
1/22	Ih Case invoice#3456 parts	$ 457.34

Account Payable

Date	Description	Debit	Credit

Payroll Register

The following need to be recorded in the payroll register. This includes money that you owe to your employees. Record the following in the payroll register in the space provided below.

Part time help

5/6	David Jones	8Hrs@4.80/Hr
5/9	David Jones	8Hrs
5/22	Jim Johnson	8Hrs@5.00/Hr
5/24	David Jones	8Hrs
5/29	Jim Johnson	9Hrs

Payroll Register

Date	Description	HRS	Rate	Debit	Credit

BASIC FINANCIAL PLANNING FORMS:

* Estimated costs of starting your business

* Capital equipment list

* Beginning balance sheet

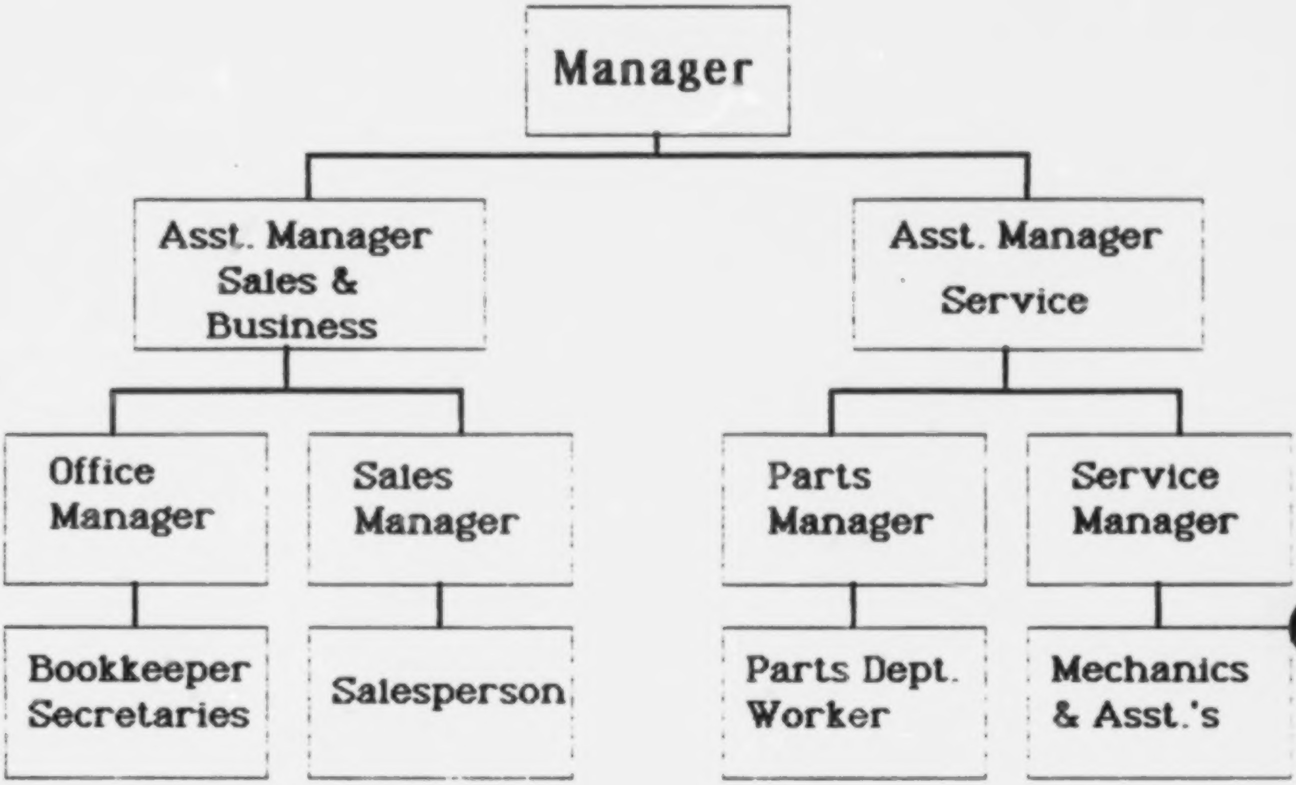
* Projected annual income statement

* Cash flow projected

* Monthly cash balance on hand

* Source and applications of financing

FARM MACHINERY DEALER ORGANIZATIONAL STRUCTURE:



Manager

Asst. Manager Sales & Business

Asst. Manager Service

Office Manager

Sales Manager

Parts Manager

Service Manager

Bookkeeper Secretaries

Salesperson

Parts Dept. Worker

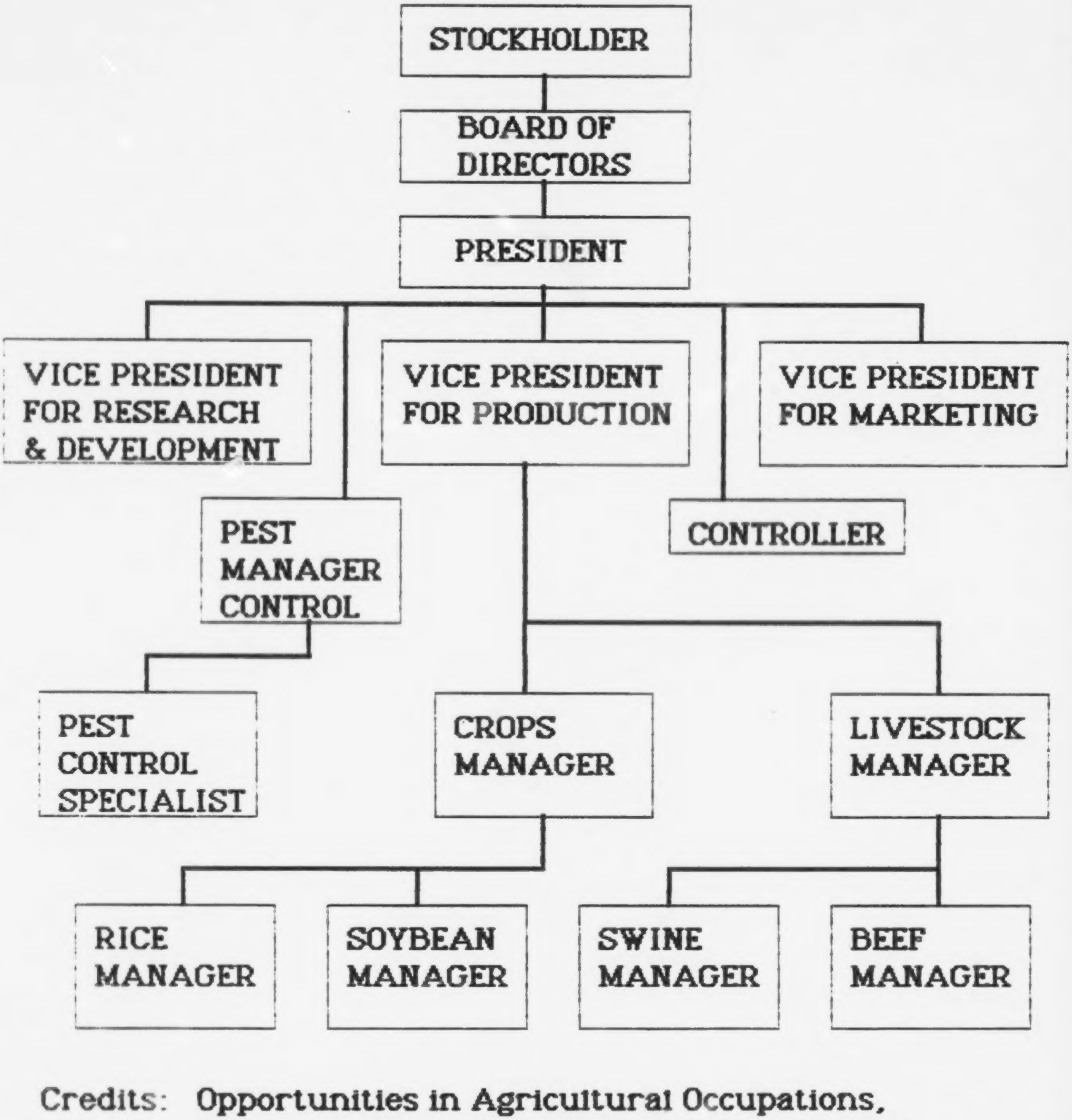
Mechanics & Asst.'s

LINE ORGANIZATION: Each worker is responsible to only one supervisor.

FUNCTIONAL ORGANIZATION: Each worker may have more than one supervisor. Supervisors specialize in an area.

LINE-AND-STAFF ORGANIZATION: Each worker has one main supervisor with special supervisors for specialized areas.

EXAMPLE OF A FEED MANUFACTURING PLANT COOPERATIVE:


STOCKHOLDER
BOARD OF DIRECTORS
PRESIDENT
VICE PRESIDENT FOR RESEARCH & DEVELOPMENT
VICE PRESIDENT FOR PRODUCTION
VICE PRESIDENT FOR MARKETING
PEST MANAGER CONTROL
CONTROLLER
PEST CONTROL SPECIALIST
CROPS MANAGER
LIVESTOCK MANAGER
RICE MANAGER
SOYBEAN MANAGER
SWINE MANAGER
BEEF MANAGER

Credits: Opportunities in Agricultural Occupations,
Willard H. Wolf, Ohio State University, 1976

PROBLEM AREA 3

WHAT SHOULD BE CONSIDERED WHEN DEVELOPING A BUSINESS PLAN?

Contents

Page

Teaching Outline..1

TM-1 A Business Plan Is.................................7

TM-2 Reasons for Developing a Business Plan.............8

TM-3 A Business Plan Inculdes a.........................9

TM-4 The Description of the Business Plan Includes......10

TM-5 The Business Marketing Plan Includes..............11

TM-6 The Organizational Plan Includes a Description Of..12

TM-7 The Financial Plan Includes.......................13

PROBLEM 3: What should be considered when developing a business plan?

INTEREST APPROACH:

Ask the coach of the school football or basketball team to speak to the class about how he uses a game plan when playing another team. Have him discuss with the class (1) the components of the game plan, (2) how he develops his game plan, (3) how he prepares his team to carry out the plan, and (4) how he implements the plan to win the game. Relate how the game plan used by the coach is like the game plan used by an agricultural business. Invite a local agricultural business manager to share with the class (1) the components of his business plan, (2) how he developed his business plan, (3) how he accumulated the resources to carry out his plan, and (4) how he implemented his plan. Have students describe in the form of a short paper, the similarities of the plans described by both speakers.

STUDY QUESTIONS:

1. What is a business plan?
2. What are the reasons for developing a business plan?
3. What information should be included in the business plan?
4. What information should the description of the business provide?
5. What information is needed when developing the market plan?
6. What information is needed when developing an organizational plan for the business plan?
7. What information is needed when developing the financial plan for the business?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning activities should be emphasized through the Student Learning Activities:

To apply general principles to particular situations. Student Learning Activity #1.

To accept responsibilities for obligatons. Student Learning Activity #1 and 2.

To accept one's role as a responsible citizen. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Strengthen the students' ability to follow written directions. Student Learning Activity #1, and 2.

Improve the students' ability to write legibly. Student Learning Activity #2.

Aid the student in developing a pleasant, flexible, and clearly audible voice. Student Learning Activity #2.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Recognizing logical inconsistencies in a line of reasoning. Student Learning Activity #1.

Distinguishing relevant from irrelevant information, claims, or reasons. Student Learning Activity #1 and 2.

Distinguishing between verifiable facts and values claims. Student Learning Activity #1 and 2.

STUDENT LEARNING ACTIVITIES:

1. Present and discuss TM-1, 2 and 3 with the class. Have each student select a business idea that, if they could, they would like to start (i.e., a lawn care business, a machinery repair business, a fresh produce market, etc.). Using the information discussed on TM-3, have each student outline the plan that he/she would follow to establish the business that they selected.
2. Using the inforamtion provided on TM-4, 5, 6, and 7, have the students provide detailed information relative to the description, marketing plan, organizational plan, financial plan for the business each student outlined in Student Learning Activity #1. When the students have finished their business plan, duplicate a copy for each student in class. Have students present and discuss their plans to the class.
3. Help each student implement his plan.

CONCLUSIONS:

A business plan is:

A road map to owning and operating an agribusiness.

Agribusinesses fail because the entrepreneurs didn't plan carefully before they opened their business.

Reasons for developing a business plan are:

A business plan leads to sound organizational structure.

A business plan produces a marketing plan.

A business plan clarifies financial needs.

A business plan identifies management pathways.

A business plan serves as a communication tool.

Information that should be included in a business plan:

Description of the business.

Marketing plan.

Organization plan.

Financial plan.

Information that needs to be provided in the description of the business:

The type of business being planned.

The produce or service to be sold.

The outlook for the success of the business.

The growth opportunities.

Information that should be included in the marketing plan:

Potential customers.

The steps to be taken to hold share of the market.

Competitors and how their businesses are prospering.

Sales promotion procedures.

Potential suppliers.

Factors that influence the choice of location.

Features of the location.

Building contribution to the marketing plan.

Features of the building layout.

Information that should be included in an organizational plan as part of the business plan:

Management of the business.

Manager's qualifications.

Number of employees needed.

Employee hiring, salaries, benefits, training, and supervision plans.

Management of finances.

Record keeping procedures.

Consultant or specialist assistance.

Type of ownership.

Licenses and permits needed.

Business regulations

Information that should be included in the financial plan:

Estimated business income for the first year.

Estimated quarterly income for the second and third years.

Cost of opening the business and sustaining it for its first 18 months of operation.

Monthly cash flow during the first year.

Quarterly cash flow for the second and third years.

Personal monthly financial needs.

Sales volume needed to make a profit during the first three years.

The break-even point.

Projected assets, liabilities, and net worth on the day before opening.

Total financial needs.

Potential funding sources. How will you use the money from lenders or investors?

Securing of loan.

EVALUATION:

Upon completion of this lesson, students will be able to:

Define what a business plan is.

List the reasons for developing a business plan.

Identify what information needs to be included in a business plan.

List what needs to be considered in developing financial plan.

OPTIONAL LEARNING ACTIVITIES:

Invite a banker to discuss what should be involved in a business plan from their perspective.

REFERENCES:

Developing the Business Plan, Level 1 and 2, The National Center for Research in Vocational Education, Ohio State University, Columbus, Ohio.

Business Administration. Napier, D. Instructional Materials Laboratory, University of Missouri-Columbia.

Achieving Success in Small Business. Distributive Education Program Area, Division of Vocational and Technical Education, College of Education, Virginia Politechnic Institute and State University, Blacksburg, Virginia.

A Business Plan Is

A road map to

6
To Sully
To Kellogg
27
To Lynnville
Safety Rest Area
Safety Rest Area
To New Sharon
146
146
To Grinnell
80
To Montezuma
63
63
To Tama
MALCOM
BROOKLYN
To What Cheer
21
21
To Belle Plaine
VICTOR
Safety Rest Area
Safety Rest Area
To Millersburg
To Ladora
To North English
To Marengo

owning and operating an agribusiness!

Reasons for Developing a Business Plan

Leads to Sound Structure

Produces a Business Plan

Clarifies Financial Need

Identifies Management pathways

Serves as a Communication Tool

The Business Plan

Includes a:

Description

Marketing Plan

Organization Plan

Financial Plan

The Description of the Business Plan Includes:

Type of Business

Produce a Service to be sold

Outlook for the business

Opportunities for the business to grow

The Business Marketing Plan Includes:

* Potential customers
* How to hold share of the market
* A description of the competition and how they are prospering
* Sales promotion procedures.
* Potential supplies
* Business location

THE ORGANIZATIONAL PLAN INCLUDES A DESCRIPTION OF:

Management of the business

Manager qualifications

Number of employees needed

Employee salaries, benefits, training and supervision plans

Management of finances

Record keeping procedures

Consultant or specialist assistance

Type of ownership

Licenses and permits needed

Business regulations

THE FINANCIAL PLAN INCLUDES:

ESTIMATED BUSINESS INCOME

COST OF OPENING THE BUSINESS

MONTHLY CASH FLOW

PERSONAL FINANCIAL NEEDS

SALES VOLUME NEEDED TO MAKE A PROFIT

BREAK-EVEN POINT

PROJECTED ASSETS, LIABILITIES AND NET WORTH

TOTAL FINANCIAL NEEDS

POTENTIAL FUNDING SOURCES

PROBLEM AREA 4

WHAT ARE THE ELEMENTS OF GOOD SALESMANSHIP IN AGRICULTURAL BUSINESSES?

Contents

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Teaching Outline..1

TM-1 Traits of a Successful Salesman........................7

TM-2 Meeting the Customer..................................8

TM-3 Basic Needs of Customers..............................9

TM-4 Secondary Wants of Customers.........................10

TM-5 Rational Reasons for Buying a Product................11

TM-6 Emotional Reasons for Buying a Product...............12

TM-7 When Closing a Sale..................................13

TM-8 When Closing a Sale, Do Not..........................14

TM-9 When Selling on the Telephone........................15

TM-10 When Using the Telephone............................16

TM-11 When Using the Telephone Avoid:.....................17

ACT-12 Telephone Conversation Evaluation Form...............18

INFO-13 Potential Customers List..........................19

Problem 4: What are the elements of good salesmanship in agricultural businesses?

INTEREST APPROACH:

Jim Turner, a salesman for the Lynnville Feed Store, stopped by Mr. Drahota's farm with the intent of getting him to switch the brand of feed he was feeding his hogs and cattle to that sold by the feed store. Jim had the goal in mind of selling him feed and making Mr.Drahota a regular feed customer. Jim greeted Mr. Drahota and immediately began his sales pitch. The main point Jim was making was that the feed Mr. Drahota was feeding was far inferior to that sold by Jim. After listening to Jim for a while, he told him that he was satisfied with his present feeding program and planned to continue it. Jim would not accept Mr. Drahota's response and continued to pressure him to buy feed from him. After a while, Mr. Drahota became aggrarvated and told him to leave. Jim became angry and told Mr. Drahota that he wasn't a very good farmer and left. Mr. Drahota became so angry that he called the manager of the feed store and complained to him bitterly about the conduct of his salesman. As the manager of the store, what would you do to smooth out the situation with Mr. Drahota and what would you say and do to your salesman?

STUDY QUESTIONS:

1. What are the traits of a successful salesman?
2. How does a sales person meet and effectively relate to customers?
3. What motivates people to buy merchandise?
4. How do you close a sale?
5. How should one use the telephone when selling merchandise?
6 How does one maintain good customer rapport after the sale or lack of one?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through Student Learning Activities:

For acceptance of one's own ability. Student Learning Activity # 2.

To accept a personal set of values on an ethical system to guide behavior. Student Learning Activity #3.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

To listen carefully and correctly. Student Learning Activity #5.

To express oneself orally. Student Learning Activity #4.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction of this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determining the accuracy of a statement. Student Learning Activity #2 and 3.

Identify ambiguous and equivocal claims or arguments. Student Learning Activity #2 and 3.

Determine the strength of an argument. Student Learning Activity #3.

STUDENT LEARNING ACTIVITIES:

1. Share TM-1--the traits of a successful salesman with the students. After sharing TM-1, ask them to list

what they like or dislike in the traits of a salesperson they have dealt with in the past. Then have them list the traits they would like to see in the perfect salesperson and explain why.

2. Discuss how a salesperson should meet a new customer with the students (TM-2). Discuss the importance of each item. Provide each student with the potential customer list (INFO-13). Have the students review the potential customers. Divide students into pairs. Assign one student the role of salesman and the other the role of customer. Give each salesperson a situation where a salesperson would typically meet a new customer. Have the two students role play the parts of a salesperson meeting a new customer. While the two are role playing, have the rest of the students list the good points and points for improvement of each sales demonstration.

3. Share TM-3, 4, 5, and 6 and discuss with the students. Ask the students to go home and ask their parents why the made their three most recent purchases. Have them report back to the class the next day with the answers the parents gave. Summarize students answers according to whether the purchase met a need or want and whether the reason for the purchase was rational or emotional.

4. Share and discuss with the class TM-7 and 8 on closing a sale. Provide several students an agricultural product of the teachers choosing to sell. Select members from the class to serve as customers. Have each salesperson sell the product to the customer. Have students observe how they closed their sales and describe, in a short paper, their closings based on TM-7 and 8. The customer can be instructed to portray one of the people listed on the potential customer list in INFO-3.

5. Review and discuss TM-9, 10 and 11. Secure two telephones for class use. Use one as the business phone and the other as a customer phone. Have each student serve as a sales person and another as a customer and complete a sale over the telephone. Have the other students evaluate each sale using ACT-12.

Compare the demonstrations using the students evaluations.

CONCLUSION:

Traits of a successful salesman?

The ability to communicate:

To the customer.

To the employees.

To the boss.

About the products.

Dependability

Pride

Personality

Initiative

Honesty

Adaptability

Understanding of what is selling

The American Marketing Associaiton defines selling as "the personal of impersonal process of satisfying and persuading a prospective customer to buy a commodity or service, or to act favorably on an idea that has commercial significance to the seller." Selling is helping customers make decisions. Personal selling is the process of helping customers fulfill their needs in a face-to-face situation.

Meeting the customer.

Prepare a personal information file on a potential customer.

If you make a call, be:

- Prompt
- Alert
- Interested
- Firm handshake and greeting.

Methods used in presenting a product?

Understanding what motivates a customer to buy.

- Basic needs:
    - Food, water, rest
    - Freedom from fear and danger
    - Security
    - Self-esteem
    - Social need for love and affection
- Secondary wants:
    - Convenience
    - Efficiency
    - Dependability
    - Style
    - Cleanlines.
    - Desire for bargains

Both basic needs and secondary wants are reasons that motivate a customer to buy. A rational decision versus an emotional one will determine if the customer will patronizeone agricultural business over another. Rational and emotional reasons for buying are listed below.

Rational:

- Durability
- Reliability
- Usefulness
- Cost

Emotional:

- Status
- Pride
- Adventure
- Self-image

When determining the method to use, one must be aware of what the customer wants and direct his wants in the direction of your products.

Closing a sale.

You must wait until the customer seems to be sold on the product.

If customer is offering resistance, point out the product's strong points, service points, and reliability. Overcome the objection with positive statements rather than negative.

When the customer seems ready, ask for the customer's signature.

Many sales in agricultural businesses are made over the telephone. Procedures for selling over the telephone are presented on TM-9, 10, and 11.

How does one maintain good customer rapport after a sale or lack of one?

Use a follow-up call or visit to see if the product is performing to the customer's satisfaction.

Thank the customer for buying or looking. Invite the customer back again if he needs anything your business may have to sell.

Be sure to service whatever you sell or see that the need is met by the agricultural business. Bad will can develop if a customer buys a product, has trouble with it, and the business will not stand behind the sale by working out the problem with the customer.

EVALUATION:

Upon completion of this unit, the students should be able to :

List the traits of a successful salesman.

Define what is meant by selling.

Explain what motivates a customer to buy.

Explain how to close a sale.

Demonstrate how to close a sale.

REFERENCES:

"Beyond a dream: an Instructor's Guide for Small Business Exploration."Balogh Judy: Ashmore Catherine. The National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio, 1985.

"Agricultural Sales and Service." Department of Public Instruction, Division of Vocational Education, Agricultural Education Section, Raleigh, North Carolina. August 1972.

TRAITS OF A SUCCESSFUL SALESPERSON

Ability to Communicate

Pride

Dependability

Personality

Initiative

Honesty

Adaptability

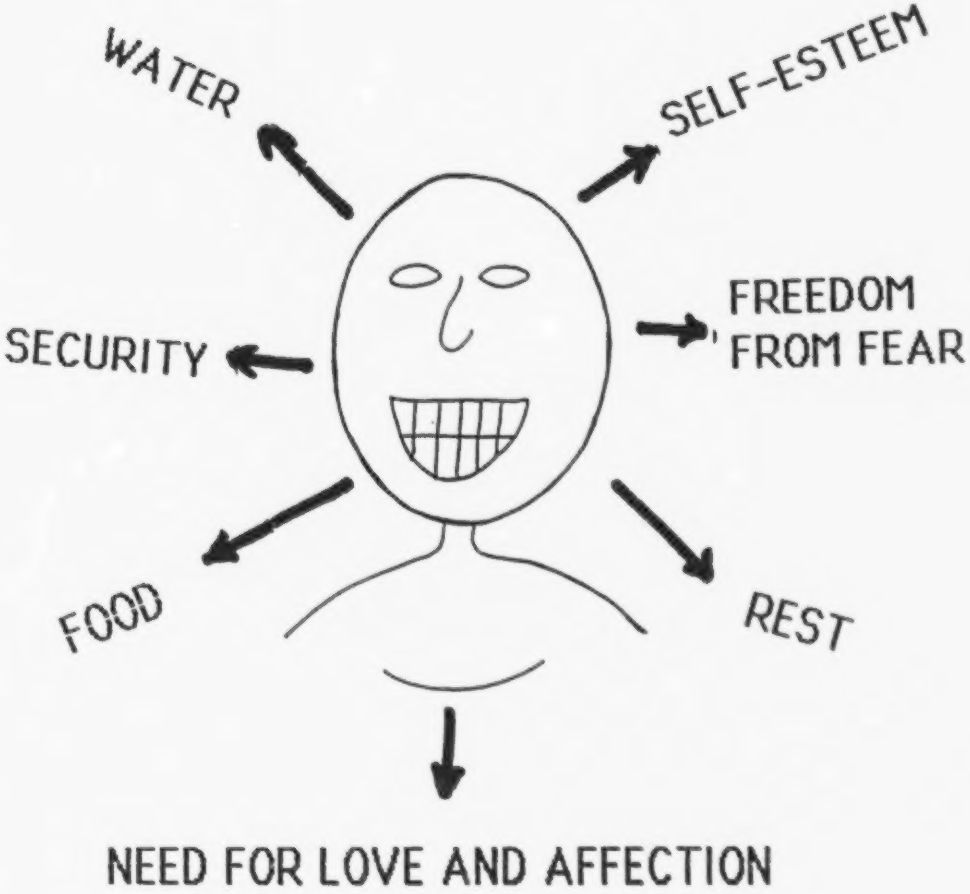
Understanding of Selling

MEETING THE CUSTOMER

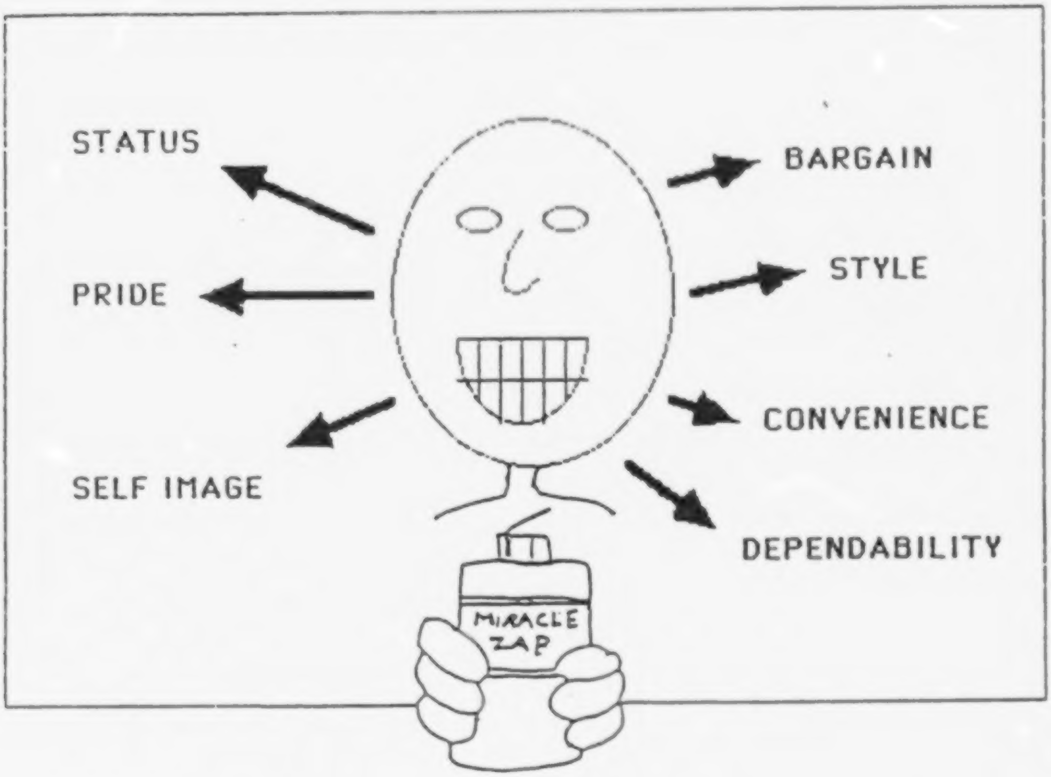
When you call:

1. Have prepared a personal informational file on the potential customer.
2. Be prompt.
3. Be alert to needs.
4. Be interested in the customer.
5. Give a firm handshake and greeting.

Basic Needs of Customers


WATER
SELF-ESTEEM
SECURITY
FREEDOM FROM FEAR
FOOD
REST
NEED FOR LOVE AND AFFECTION

Secondary Wants of Customers


STATUS
PRIDE
SELF IMAGE
BARGAIN
STYLE
CONVENIENCE
DEPENDABILITY
MIRACLE ZAP

RATIONAL REASONS FOR BUYING A PRODUCT

DURABILITY

RELIABILITY

USEFULNESS

COST

EMOTIONAL REASONS FOR BUYING A PRODUCT

STATUS

PRIDE

ADVENTURE

SELF-IMAGE

When Closing a Sale

Display a friendly manner at the close.

Have all materials and equipment that will be needed.

Realize that begging for a sale makes the salesperson and the offer look bad.

Ask the prospect to "OK" or approve the order rather than sign it.

Make buying as easy and painless as possible.

Try for privacy at the close.

Study each prospect as a baseball pitcher studies each batter.

Lead the prospect to think of himself as the owner of the product from the beginning of interview.

When Closing a Sale, Do Not

Let the prospect know how much the sale means.

Be apologetic, particularly in quoting price.

Make written or even oral promises unless authorized to do so.

Make a ceremony out of closing.

Give the prospect an excuse or an opportunity to back away from the purchase.

Ever ask the prospect for the buying decision in such a way that he can answer with a "Yes" or a "No".

Make it difficult for the prospect to complete the purchase quickly if the prospect cares to do so.

Let the prospect miss seeing that the salesperson expects the prospect to buy.

Make it easier for the prospect to refuse than to buy.

When Selling on the Telephone

* Answer promptly

* Be business-like

* Be alert and pleasant

* Quote prices

* Get customers to come into store

When Using the Telephone

Answer the telephone promptly.

Speak clearly and distinctly.

Give name of the business.

Give employee's name.

Be cheerful and friendly.

Be Courteous.

Avoid coughing into the mouthpiece.

Never drop the receiver with the customer on the line.

Always let the customer hang-up first.

Know what merchandise is available and at what price.

Spell names and addresses correctly.

Get correct delivery information.

Use good english.

Help customers decide.

Acknowledge customer's likes and dislikes.

Ask if there is anything else the customer needs.

When Using the Telephone Avoid:

Slow, indifferent and incomplete answers.

Failing to listen to what the customer wants.

Failing to use word pictures.

Failing to sell extra items, larger quantities, or better merchandise.

Failing to ask the customers to buy.

Winning the argument and losing the sales.

Failing to follow through.

TELEPHONE CONVERSATION EVALUATION FORM

	Yes	No
Answered promptly	___	__
Spoke clearly	___	__
Gave name of business	___	__
Game name of employee	___	__
Was cheerful	___	__
Was friendly	___	__
Was courteous	___	__
Knew merchandise being sold	___	__
Let customer hang-up first	___	__
Checked on spelling of names	___	__
Checked addresses	___	__
Provided delivery information	___	__
Helped customer	___	__
Used good English	___	__
Helped customers decide	___	__
Acknowledged likes and dislikes	___	__
Asked for other needs	___	__

POTENTIAL CUSTOMERS

NAME: DAVID LARSON AGE: 32
OCCUPATION: FARMER SPOUSES NAME: LISA
CHILDREN: 3

OTHER INFORMATION: DAVE IS A GENERAL CROP AND LIVESTOCK FARMER. HE OWNS 800 AC. AND RENTS 800 MORE FROM NEIGHBOR. RAISES CORN AND SOYBEANS AND ALFALFA HAY ALONG WITH 600 HD PER YEAR OF FEEDER CATTLE. TENDS TOWARD THE CONSERVATIVE SIDE ON ISSUES AND IN FARMING. EQUIPMENT IS NOT NEW BUT IN EXCELLENT REPAIR. DAVE IS QUITE THE MECHANIC.

* * *

NAME: JAMES SMITH AGE: 44
OCCUPATION: SWINE FARMER SPOUSES NAME: MARY
CHILDREN: 2

OTHER INFORMATION: JIM IS A SWINE FARMER. HE OWNS 320 AC. AND RENTS 200 MORE FROM NEIGHBOR. JIM RAISES CORN AND SOYBEANS 1600 HD PER YEAR OF PIGS FARROW TO FINISH. JIM IS ON THE LOCAL SCHOOL BOARD AND A MENBER OF THE COUNTY FAIR BOARD. EQUIPMENT IS ALMOST NEW AND IN EXCELLENT REPAIR. JIM LIKES TO HAVE THE LOCAL MECHANIC TAKE CARE OF ALL HIS REPAIRS.

* * *

NAME: DONALD SMITH AGE: 26
OCCUPATION: FARMER SPOUSES NAME: NONE
CHILDREN: 0

OTHER INFORMATION: DON IS A BEGINNING FARMER AND IS TRYING LOTS OF NEW IDEAS. HE OWNS 240 AC. AND RENTS 200 MORE FROM HIS FATHER. DON RAISES CORN AND SOYBEANS AND WHEAT. DON IS ALSO WORKING AT THE LOCAL ELEVATOR HELPING TO MAKE THE CASH FLOW WORK. DON IS A FORMER FFA STATE FARMER AND IS A MEMBER OF THE LOCAL ALUMNI CHAPTER. DON'S EQUIPMENT IS ALMOST ALL USED, PURCHASED FROM HIS FATHER, AND IS STARTING TO SHOW SIGNS OF AGE . DON IS ENROLLED IN THE FARM AND FAMILY MANAGEMENT PROGRAM TRYING TO LEARN MORE ABOUT THE BUSINESS OF FARMING.

* * *

NAME: LINDA LARSON AGE: 30
OCCUPATION: FARMER SPOUSES NAME: MARTY
CHILDREN: 4

OTHER INFORMATION: LINDA IS A GENERAL CROP AND LIVESTOCK FARMER. SHE OWNS 800 AC. AND RENTS 800 MORE FROM NEIGHBOR. RAISES CORN AND SOYBEANS AND ALFALFA HAY ALONG WITH 600 HD PER YEAR OF FEEDER CATTLE. TENDS TOWARD THE CONSERVATIVE SIDE ON ISSUES AND IN FARMING. EQUIPMENT IS NOT NEW BUT IN EXCELLENT REPAIR. LINDA IS QUITE THE MECHANIC. MARTY IS THE LOCAL VO- AG INSTRUCTOR AND ENJOYS HELPING WHEN HE CAN.

****

NAME: DANIAL SMITH AGE: 38
OCCUPATION: SWINE FARMER SPOUSES NAME: ANN
CHILDREN: 1

OTHER INFORMATION: DAN IS A SWINE FARMER. HE OWNS 320 AC. AND RENTS 200 MORE FROM NEIGHBOR. DAN RAISES CORN AND SOYBEANS, 2500 HD PER YEAR OF PIGS FARROW TO FINISH. DAN IS ON THE LOCAL SCHOOL BOARD AND ACTIVE IN THE LOCAL SWINE PRODUCERS. EQUIPMENT IS NEW AND IN EXCELLENT REPAIR. JIM LIKES TO TAKE CARE OF ALL HIS REPAIRS HIMSELF.

****

NAME: REBECCA SMITH AGE: 28
OCCUPATION: FARMER SPOUSES NAME: NONE
CHILDREN: 0

OTHER INFORMATION: BECKY IS A BEGINNING FARMER AND IS TRYING LOTS OF NEW AREAS. SHE OWNS 240 AC. AND RENTS 200 MORE FROM HER FATHER. BECKY RAISES CORN AND SOYBEANS AND WHEAT. SHE IS ALSO WORKING AT THE LOCAL ELEVATOR HELPING TO MAKE THE CASH FLOW WORK. BECKY IS A FORMER FFA STATE AGRIBUSINESSMEN AND IS A MEMBER OF THE LOCAL ALUMNI CHAPTER. HER EQUIPMENT IS ALMOST ALL USED, PURCHASED FROM HER FATHER AND IS IN VERY GOOD CONDITION. SHE IS ENROLLED IN THE FARM AND FAMILY MANAGEMENT PROGRAM TRYING TO LEARN MORE ABOUT THE BUSINESS OF FARMING.

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PROBLEM AREA 5

WHAT IS A MARKETING PLAN?

Contents

Page

Teaching Outline....................1

TM-1 Marketing....................8

TM-2 Product Development....................9

TM-3 Factors in Selecting a Target Market....................10

ACT-4 Determining a Target Market....................11

TM-5 Why do consumers buy?....................12

ACT-6 Buying Survey....................13

TM-7 Steps in Marketing Research....................14

TM-8 Four P's of Marketing....................15

ACT-9 Determining Customer Needs and Wants....................16

TM-10 Parts of a Marketing Plan....................17

PROBLEM 5: What is a marketing plan?

INTEREST APPROACH:

Ask the students how many of them sold a product or bought one for the FFA Chapter. Wait for a response and ask those who have sold how they determined who they would sell to. The instructor should relate this to how a target market can be identified in a marketing plan. Then ask those who bought from an FFA member why they bought. Ask more than one student. Relate these answers to the buying motives one needs to understand in developing a marketing plan.

STUDY QUESTIONS:

1. What is the definition of marketing as it relates to agribusiness?
2. What is a target market and why is it important?
3. Why do consumers buy?
4. What are market research procedures?
5. What are the four "P's" of marketing?
6. What are the parts of a marketing plan?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

For acceptance of one's own ability. Student Learning Activity #3.

For purpose of entering into the job market and/or continuing education for career exploration. Student Learning Activity #3 and 4.

To accept one's role as a responsible citizen. Student Learning Activity #4.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve the students' ability to make clear and concise notes of a meeting. Student Learning Activity #4.

Strengthen the students' ability to explain clearly and sufficiently. Student Learning Activity #2 and 3.

Improve the students' ability to write legibly. Student Learning Activity #3

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguishing between verifiable facts and value claims. Student Learning Activity #1 and 4.

Determine the strength of an argument. Student Learning Activity #.

Determine the accuracy of a statement. Student Learning Activity #4.

STUDENT LEARNING ACTIVITIES:

1. Have students read the references on establishing a marketing plan. Review and discuss TM-1 and 2. Have students develop a bulletin board display on the importance of marketing to an agricultural business.
2. Discuss with the class what a target market is and why it is important to establish a marketing plan using

TM-3. Using the information provided on TM-3, have the class select a product that the FFA chapter might consider selling as a money making activity and determine the target market for selling that product using ACT-4.

3. Review and discuss TM-5 with the students. Using ACT-6, have each student interview five adults and five fellow students (other than classmates) to determine the reason these adults and students made their most recent purchase. Summarize their results and compare them to the information on TM-5.

4. Review and discuss the steps a new business should follow in determining consumer wants and needs on TM-7 and 8. Have a local agricultural business person who is considering expanding the scope of his business share his ideas with the class. Have students research consumer demands and suggest where his best potential for expansion exists (ACT-9).

5. As a class project, have students select a product or business idea and develop a market plan for the product or idea following the outline on TM-10.

CONCLUSIONS:

Definition of marketing as it relates to agribusiness:

Marketing includes all of the activities involved in exchange of goods and services between producers and consumers. It can be grouped within eight functions:

Product development

Exchanging

Transportation

Storing

Financiing

Pricing

Communication

Information analysis

A target market:

This is the first step in developing a marketing plan. A target market is a group of potential customers with similar needs that can be satisfied by the company. Factors involved in selecting a target market:

Costs of selling to the group.

Anticipated sales volume.

Size and number of competitors.

Resources required to sell to the target market.

For any business to succeed, the correct target market must be correctly identified.

Buying by consumers:

They buy for two basic reasons - emotional reasons and rational needs.

Emotional buying motives include:

Pride of personal appearance

Social achievement

Ambition

Cleanliness

Pleasure

Increase leisure time

Rational buy motives include:

Durability

Economy in use

Economy in purchase

Handiness

Efficiency in operation

Dependability in use

Mrket research procedures:

This can give the beginning owner some idea about how to tell the products the consumers want or need.

Identify the problem.

Make a preliminary study.

Plan the research.

Gather data.

Interpret the data.

Develop conclusions.

Two types of methods to collect data include interview method. This includes face to face, telephone, questionnaires, etc. The second method is an observation method. This includes looking at the available facts.

The four "P's" of marketing:

Product - important to know who your potential customers are and what they want or need.

Price - the objective of pricing is to offer the product or service at a price that is equal to the value received by the customer.

Place - marketing the product or service available at a place that is convenient for customers.

Promotion - involves trying to determine the proper means of communicating the availability and benefits of the product or service to the potential customer. Promotion is sometimes called advertising. The following formula is a good one for advertising:

Get the attention of the desired product.

Interest must be held.

Must create a desire for whatever is being advertised.

Must induce the customer to act.

The parts of a marketing plan:

Market description - target market to be observed.

Market objectives - goals related to sales.

Competition - competitors, product, customer groups, strengths and weaknesses.

Environment - factors in the marketplace that could affect the company's success.

Marketing mix - product, price, place, and promotion.

Budget - show how funds are to be spent for marketing mix.

EVALUATION:

Upon completion of this lesson, the students will be able to:

Define the term marketing.

Describe what a target market is.

Explain emotional and rational motives for buying.

List the five parts of market research procedures.

List and explain the 4 "P's" in marketing.

List and explain the parts of a marketing plan.

REFERENCES:

Planning the Marketing Strategy, Level 1 & 2. The National Center for Research in Vocational Education, Ohio State University, Columbus, Ohio.

Achieving Success in Small Business. Distributive Education. Program Area. Division of Vocational Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Business Administration. Napier, D. Instructional Materials Laboratory, University of Missouri, Columbia, Missouri.

MARKETING

Marketing includes all of the activities involved in the exchange of goods and services between producers and consumers.

PRODUCT DEVELOPMENT

Exchange

Storing

Pricing

Information Analysis

Transportation

Financing

Communication

FACTORS IN SELECTING A TARGET MARKET:

Cost of selling.

Anticipated volume of sales.

Size and number of competitors.

Resources required to sell.

DETERMINING A TARGET MARKET

You are to determine the target market for the FFA chapter selling _________________________. Using the outline below, determine if the product is saleable and a profitable adventure for the FFA chapter.

Cost of selling:

Anticipated sales:

Size and number of competitors:

Resources required to sell product:

Why do consumers buy?

EMOTIONAL BUYING MOTIVES

PRIDE

SOCIAL ACHIEVEMENT

CLEANLINESS

AMBITION

PLEASURE

LEISURE TIME

RATIONAL BUYING MOTIVES

ECONOMY OF USE

ECONOMY IN PURCHASE

EFFICIENCY IN OPERATION

DURABILITY

HANDINESS

DEPENDABILITY IN USE

BUYING SURVEY

Survey Form of Five Adults and Five Students

You are to survey five adults and five students to determine the reason these people made their most recent purchase. List the reasons given by each person below.

Adults	Students

STEPS IN MARKETING RESEARCH

Identify the problem

Make a preliminary study

Plan the research

Gather data

Interpret data

Develop conclusion

FOUR P's OF MARKETING

Product

Price

Place

Promotion

DETERMINING CUSTOMER NEEDS AND WANTS

The ________________________________ agricultural business is considering expanding its business. What customer needs and wants exist that this business could satisfy?

Using the following outline, answer this question.

Problem:

Information collection plan:

Data gathered:

Interpretation of data:

Conclusion and recommendations:

Parts of a Marketing Plan

1. Market description

2. Market objectives

3. Competition

4. Environment

5. Marketing mix

6. Budget

PROBLEM AREA 6

HOW DOES THE MANAGER OF AN AGRICULTURAL BUSINESS MAINTAIN GOOD WORKING RELATIONSHIPS WITHIN HIS/HER BUSINESS?

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TM-1 Components of Human Resource Management....10

TM-2 Types of Employee Motivation....11

TM-3 Employee Evaluation Criteria....12

TM-4 Steps to Evaluation....13

TM-5 Management Is....14

PROBLEM 6: How does the manager of an agricultural business maintain good working relationships within his/her business?

INTEREST APPROACH:

The manager of the Freel Agricultural Supply Store had an opening in his service department. It was a new position as supervisor of the department. He had five employees working in this department. One person had worked in that area 15 years, two had worked there 12 years, one person five years and one person four years. The manager felt that the person who had worked in the service area four years had the qualities needed to best fill the job. Because he is the manager and believes that his decisions are final, he moved this employee into this position without consulting with the other employees in that department. After making the appointment, he asked the other employees to help this person as he assumed his new duties. The other employees refused to help the younger employee. They did the opposite. They did everything possible to make him fail in his new job. They believed that the man with 15 years of experience should have been promoted to the position. What went wrong in this situation? Did the manager use bad judgement when appointing the youngest man to the position? How could he have avoided this situation? What should he do to smooth out relationships between himself and his employees and between employees?

STUDY QUESTIONS:

1. Why is human resourse management important in an agribusiness?
2. How should a manager motivate employees?
3. How does a manager communicate effectively with his/her employees?
4. How should employee performance be evaluated?
5. How can various management styles affect human relations within an agricultural business?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

For a personal philosophy of life. Student Learning Activity #1.

For human relatons and communicative skills. Student Learning Activity #3.

For acceptance of one's own ability. Student Learning Activity #4.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve the students' ability to write legibly. Student Learning Activity #1.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determining the accuracy of a statement. Student Learning Activity #1.

Determining the strength of an argument. Student Learning Activity #4.

STUDENT LEARNING ACTIVITIES:

1. Review and discuss the components of good human resource management in an agricultural business (TM-1). Assemble a group of local agribusiness managers before

the class and ask that each share their policies in managing, organizing, and controlling employees in their businesses. As they are speaking, have the students list the points made by each manager. Have students summarize their lists. Repeat the activity using a panel of employees from these same businesses. Have students compare their results from both panels noting differences and similarities.

2. Review and discuss TM-2. Have each student select one of their most recent jobs (preferably a job that they had been employed to do) and list those factors from outside and within themselves that motivated them in completing the job. Have each student discuss their lists with the class. Have each student interview an employee in an agricultural business to determine what motivates them in their work. Have students compare the results of their interviews with their personal assessment of what motivated them in their job.

3. Obtain an employee handbook from several local agricultural businesses. Have students list those employee informational items stressed by these businesses. Compare these lists with the school faculty and student handbooks.

4. Review and discuss TM-3 and 4. Using the job selected by the student in Activity #2, have students develop a set of criteria that they would like to have been evaluated by and a scale for evaluating each criteria. Have each student evaluate their work performance. Ask the students to take their form to the person who employed them and ask that person to evaluate their work performace. Have students compare the differences in evaluation and identify why the differences existed.

5. Explain what management style is and how it affects an agricultural business (TM-5). Discuss the two management theories. Invite a manager of each type and have them share with the class why they take that approach to managing their businesses.

CONCLUSION:

In an agribusiness, human resource management is how you deal with your employees. There are three basic steps in human resource management. They include.

Managing: Planning, directing, organizing, and controlling employees.

Organizing: Orienting, training, motivating, and leading employees.

Controlling: Evaluting and rewarding employees.

In a broader sense, human resouce management may be defined as the process of planning, organizing, directing, and evaluating all the activities that directly involve the employee and promotes his/her productivity.

It is important in terms of how your employees treat the customers. Another reason why managing your human resources is so important is that employees are a costly resource.

The firm's employees, especially the most qualified ones, can get comparable if not better jobs with other employers.

When a firm faces a scarcity of supervisory and specialized personnel with adequate experience and job capabilities, it has to train and develop its own people.

The cost of hiring and training employees at all levels is increasing. For instance, hiring and training a salesperson can cost several thousand dollars. A mistake in hiring or slow and inefficient methods of training can be costly.

Most employees, whether or not they are represented by labor unions, continue to seek improvements in salary, employee benefits, and working conditions. All employee compensation must be based on what the firm can afford, must comply with current practices of other employers, and must be understood and accepted by the employees. To do all this, employee policies and operating procedures should be thought about and developed carefully.

Just because a firm offers competitive salaries, benefits, and working conditions doesn't mean that all your employees will do good work. In addition to these financial or physical compensations, employees need responsibility, the opportunity to develop new skills, or some recognition of accomplishment in their jobs.

There are two types of employee motivation.

Extrinsic: This motivation comes from outside the employees.

Examples are: paycheck, chance of a raise, fear of losing job.

This is where the most motivation can be done on part of entrepreneurs.

Intrinsic: This motivation comes form within the employee.

Examples are: self-satisfaction, personal reward.

Is much more difficult to control.

To begin to motivate an employee the agribusiness must deal with basic needs. One of the important basic needs managers can influence is safety in the workplace. Other basic needs include fair wages, acceptable hours, and a reasonably pleasant working environment.

Personal needs are also considered to be good motivational tools. They include respect for employees, appreciation for employees. The basic guideline is to treat them the way you would want to be treated.

An employee handbook serves as a link between you and the employee. When employees begin working for your firm, there will be a great deal of information on things such as work hours, pay, company rules, and so on to provide about the job. With an employee handbook, they can simply review the materials and then meet with you or another employee to discuss any questions. The following subjects should be included in a company handbook:

- Welcome message
- Company description and history
- Career possibilities
- Procedures:
  - Working hours
  - Where to report to work
  - How to report time worked
  - Rest periods
  - Absence from work and how to report absences
  - Employment records
  - Pay periods
  - Shift premiums
  - Safety and accident prevention
  - Use of telephone
  - Complaint procedures
- Benefits:
  - Vacations
  - Holidays
  - Group life insurance
  - Hospitalization and other medical benefits

- Parking
- Training programs
- Personal leave
- Sick leave
- Christmas bonus
- Savings plan
- Profit-sharing plan
- Suggestion awards
- Jury duty
- Military leave
- U.S. old age benefits
- Unemployment compensation
- Service awards

Special services:

- Credit union
- Education plans
- Medical dispensary
- Employee purchases
- Company cafeteria
- Company magazines
- Company social events
- Sports teams or activities

Evaluating the job performance of your employees is important. It is the means by which you recognize and reward productivity. It also provides a basis for constructive criticism and improvement strategies. Evaluation is necessary to make transfer, promotion, and dismissal decisions.

Job descriptions provide the basis for evaluation. Job criteria for each description will need to be established for evaluation purposes. To determine job criteria, company goals must be established. These criteria (requirements) may include:

Accuracy of work

Attitude toward co-workers

Attitude toward superiors

Cleanliness

Manner in which tools and equipment are handled

Initiative

Attendance or days spent at work

Giving advance notice of absence from work

Ability to make decisions

Use of good judgment

You will need to design an evaluation form. You may want input from your employees to develop the form. Employees should know what the form includes and the criteria by which they will be evaluated. They will then know what kind of behavior is expected of them.

A regular evaluation schedule allows the employees to keep in touch with the progress being made on the job. It also allows the employer to keep abreast of the performance of employees. Regular evaluations give you the information you need to resolve problems quickly and in a positive fashion.

Management involves leading your employees so that the work is completed and your goals are accomplished. Hiring and training your new employees is important. However, this alone does not guarantee that your employees will be productive. To insure that they will be productive is the responsibility of the manager. The manager's supervisory style must also be appropriate and compatible with employee needs.

Basically there are two theories of management style. One theory holds that the average worker dislikes work and will avoid it if possible. Therefore, most people must be forced into getting the job done. They must also be strictly controlled. The other theory proposes that people are willing to work hard and exercise self-direction if they feel the objectives are worthy.

An autocratic manager gives order forcefully, and if necessary, threatens employees. The autocratic manager will also give orders and explanations using "positive reinforcement" or praise if the employee deserves it. The democratic manager, on the other hand, gives orders to the employee but allows the employee to make decisions on how to get the job done.

Usually the most effective management sytle consists of some combination of the autocratic style and the democratic style. Use the one that best suits your personality and business needs. However, for the entrepreneur to develop a loyal and productive employee over time, it is necessary to exercise some democratic principles.

EVALUATION:

Upon completion of this lesson, students will be able to:

Explain how human relatons fit into agribusiness.

Explain why human resource management is important.

Explain two ways employees are motivated.

List ways to communicate with the employees.

ABO-6

Explain how employees are evaluated.

List and explain two theories of managment style.

REFERENCES:

Managing Human Resources, The National Center for Research in Vocation Education, The Ohio State University, Columbus, Ohio.

Components of Human Resource Management

Managing

-Planning, directing, organizing, and controlling employees

Organizing

-Orienting, training, motivating and leading employees

Controlling

-Evaluating and rewarding employees

Types of Employee Motivation

Motivation from outside the employee

Paycheck, salary increases, fear of loosing job

Motivation from within the employee

Self-satisfaction, personal reward

Employee Evaluation Criteria:

Accuracy of work

Attitude toward coworkers

Attitude toward superiors

Cleanliness

Handling of tools and equipment

Initiative

Work attendance

Advance notice of work absence

Ability to make decisions

Use of good judgement

Steps to Evaluation

1. Schedule a Meeting
2. Review task list
3. Discuss task importance
4. Give employee feedback
5. Listen and answer questions
6. Respond to problems
7. Set Goals
8. Reaffirm positive feedback
9. Set a date
10. Thank Employee
11. Make notes

Management Is:

LEADING EMPLOYEES IN SUCH A MANNER

THAT THE WORK IS COMPLETED PROPERLY AND

THE BUSINESS GOALS ARE ACCOMPLISHED

PROBLEM AREA 7

HOW DOES ONE SECURE ADEQUATE FINANCING TO START A NEW AGRIBUSINESS?

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TM-4 Types of Lenders...............................14

TM-5 6 C's of Credit Evaluation.....................15

PROBLEM 7: How does one secure adequate financing to start a new agribusiness?

INTEREST APPROACH:

Invite a panel of representatives to class to discuss how they loan money and for what purposes. Include among these representatives a banker, credit union, savings and loan association, and small business administration representative. Have members of the class elect five members to serve as questioners for the loan panel. Assign one student the responsibility of summarizing the panel comments. After the panel discussion is finished, discuss how business loans are secured.

STUDY QUESTIONS:

1. What are start up costs?
2. What are operating expenses?
3. What are personal expenses?
4. What is equity financing and what are the advantages and disadvantages of each?
5. What are the sources of borrowing money?
6. What are the six "C's" of credit?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To apply general principles to a particular situation. Student Learning Activity #1 and 3.

Acceptance of one's own ability. Student Learning Activity #2 and 3.

Independent thinking with less need for models. Student Learning Activity #3.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Stengthen the students' ability to follow written directions. Student Learning Activity #2 and 3.

Improve the students' ability to write legibly. Student Learning Activity #2 and 3.

Aid the student in developing a pleasant, flexible, and clearly audible voice. Student Learning Activity #2.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguish between verifiable facts and value claims. Student Learning Activity #2.

Determine the strength of an argument. Student Learning Activity #2.

Determine the accuracy of a statement. Student Learning Activity #2.

STUDENT LEARNING ACTIVITIES:

1. Review and discuss TM-1 on business start-up costs and operating costs. Divide class into small groups of three or four students. First have each group member list as many different start-up costs for opening a small feed store as possible. Have the students compare lists and develop a group list. Have the students share their group list with the class to

decide if anyone forgot any start-up costs. Repeat this activity for operating costs.

2. Review the personal expenses that must be considered when starting a business on TM-2. Have students research how much a person would spend on these items with a four-member family. Have students share their results with the class.

3. Invite a local banker to speak to the class on the types of loans made by his/her bank. Using TM-3, discuss how loans are secured and the advantages and disadvantages of each. Have students select a project for the FFA and secure a loan from the bank to finance the project.

4. Divide the students into groups of two or three and assign one of the types of lenders presented on TM-4. Have students go to these loan officers and secure the documents these lenders have a borrower complete when securing a loan. When they return, make transparencies of each and compare the similarities and differences among the forms. Make copies of one set of the forms and complete a hypothetical loan.

5. Have class select a business idea, list start-up, operating, and personal costs, select the type of loan and lender, and complete an application for a loan to start the business. In addition, have students provide documentation of worth to pass a credit evaluation (TM-5).

CONCLUSION:

When starting an agricultural business, money is needed for:

There are three basic groups that you need money for, they are:

Start-up costs

Operating expenses

Personal expenses

Start-up costs are usually expenses that occur once when getting the business off the ground. Each business could incur slightly different expenses. These costs include:

Fixtures and equipment

Starting inventory

Deposits for rent and utilities

Business licenses and permits

Certain legal fees

Franchise fees

Advertising for the grand opening

Operating expenses come up after the business has started. Many businesses may not show a profit for one year. Money is needed to pay the following operating expenses:

Inventory

Advertising

Taxes

Insurance

Utilities

Supplies

Payroll

Repairs to equipment

Monthly rent

Personal expenses are those costs that are necessary for you to live. They include:

- Rent or mortgage payments
- Transportation
- Clothing
- Medical bills
- Food
- Insurance
- Utilities
- Entertainment

Equity financing has several advantages and disadvantages:

- Using personal savings:
  - Advantages:
    - Keep all of the profits.
    - Reduce amount of debt.
    - Risk of loss provides motivation to succeed.
    - Shows good faith to any potential lenders.
  - Disadvantages:
    - Chance of loss.
    - May force personal sacrifices.
    - Loss of return from use of savings.

Involving friends and family:

Advantages:

Easy and quick source of cash.

Less pressure and restrictions.

Informal arrangements.

Disadvantages:

Risk of destroying personal relationship.

May encourage unwanted involvement in business.

Forming a partnership:

Advantages:

Brings in more cash.

May be able to borrow more.

Share financial risks.

Disadvantages:

Give up part of profits.

Give up share of control and ownership.

Incorporating the business:

Advantages:

Raise large amount of cash.

Share financial risks.

Reduce legal liability.

Tax savings.

  - Disadvantages:
    - Give up part of profits.
    - Give up share of control and ownership.
- Using venture capital:
  - Advantages:
    - Large amounts of money available.
    - Money available for calculated risks.
    - Maintain control and operation of business.
    - Additional assistance usually available.
  - Disadvantages:
    - Most small businesses don't qualify.
    - Must give up part of ownership of business.
- Working with SBICs:
  - Advantages:
    - Set up specifically to help small businesses.
    - Provide loans, too.
    - Special assistance for minority businesses.
    - Others applicable from venture capital.
  - Disadvantages:
    - Favor expanding businesses versus starting business.
    - Others applicable from venture capital.

The types and sources of loans for starting an agricultural business are:

Short term loans are usually repaid in one year. These loans ordinarily are made to satisfy some immediate, temporary, or seasonal need.

Intermediate term loans are usually from one to five years. This type of loan may be used to buy new equipment or replace old.

Long term loans are normally set up for more than five years. They are used for business startup, purchase or construction of facilities, purchase real estate or obtain expensive assets requiring several years to pay off.

Commercial lenders include:

Banks

Credit unions

Commercial finance companies

Consumer finance companies

Life insurance companies

Savings and Loan associations

Some government sources include:

Small Business Association

Farmers Home Administration

Economic Development Administration

The six "C's" of credit evaluation are:

Character - The type of person seeking the loan.

Capital - The personal investment of money in the business.

Capacity - The skill and drive of management.

Collateral - amount of security borrower puts up to insure that the loan will be repaid.

Circumstances - factors beyond the borrower's control.

Coverage - Insurance protection. The lender may require some insurance on the business until the loan is repaid in case of unforeseen happenings.

EVALUATION:

Upon completion of this lesson, students will be able to:

List why money is needed.

List five of the stated start-up costs.

List five of the operting costs of an agribusiness.

List seven of the personal expenses of those listed.

List and explain the advantages and disadvantages to equity financing.

Explain three types of loans.

List five commercial lenders and two governmental programs.

List the six "C's" of credit evaluation.

REFERENCES:

Financing the Business, Levels 1 & 2. The National Center for Research in Vocational Education, Ohio State University, Columbus, Ohio

Business Administration. Napier, D. Instructional Materials Laboratory, University of Missouri, Columbia, Missouri.

Business Management and Ownership. Lyon, Barbara. Oklahoma State Board of Vocational and Technical Education, Stillwater, Oklahoma. 1982.

What do you need money for?

START -UP COSTS

- Fixtures and equipment
- Deposit, rent & utilities
- Legal fees
- Franchise Fees
- Starting inventory
- Grand opening
- Licenses & permits

OPERATING EXPENSES

- Inventory
- Insurance
- Payroll
- Advertising
- Utilities
- Repairs
- Taxes
- Supplies
- Monthly rent

PERSONAL EXPENSES INCLUDE:

Rent

Clothing

Food

Utilities

Transportation

Medical bills

Insurance

Entertainment

TYPES OF LOANS

Short term

Intermediate term

Long term

TYPES OF LENDERS:

Commercial Lenders:

Banks

Credit Unions

Commercial Finance Companies

Consumer Finance Companies

Life Insurance Companies

Savings and Loans Associations

Governmental Lenders:

Small Business Associations

Farmer's Home Administration

Economic Development Administration

6 C's OF CREDIT EVALUATION

Character

Capital

Capacity

Collateral

Circumstances

Coverage

PROBLEM AREA 8

WHAT TYPE OF RECORDS ARE USED TO MONITOR TRANSACTIONS IN AGRICULTURAL BUSINESSES

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ACT-10 Bayleen Farm Supply Center Problem..18a

PROBLEM 8: What type of records are used to monitor transactions in agricultural businesses?

INTEREST APPROACH:

James Jones is the manager of the Lineville Farm Service Center. He had sent a purchase order (INFO-1) to the Acme Fertilizer Company for fertilizer. INFO-2, 3, and 4 describes what developed as a result of his purchase order. Was he billed correctly by the Acme Fertilizer Company? If not, what should he do to correct the situation? Discuss the importance of keeping good records on all transactions in an agricultural business?

STUDY QUESTIONS:

1. What are sources of assistance in recordkeeping that can be utilized by an agribusiness?
2. What are the requirements of good business recordkeeping?
3. What types of data can be provided through business records?
4. What are the types and uses of agribusiness records, journals, and ledgers used?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning activities should be emphasized through the Student Learning Activities:

Develop self-confidence. Student Learning Activity #1.

Being receptive to other's points of view. Student Learning Activity #2.

Develop mature intellectual functioning. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following skills should be emphasized through the Student Learning Activities:

Improve the students' ability to interpret emphasis and tone of voice and facial expressions of a speaker. Student Learning Actiivty #2.

Strengthen the students' ability to comprehend a speaker's major points and supporting points. Student Learning Activity #1 and 2.

Improve the students' ability to ask pertinent questions. Student Learning Activity #1 and 2.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determine the accuracy of a statement. Student Learning Activity #1.

Determine the strength of an argument. Student Learning Activity #2.

Detecting bias. Student Learning Activity #1 and 2.

STUDENT LEARNING ACTIVITIES:

1. Discuss with the class sources of records for agricultural businesses, requirements of good record keeping, information provided by business records, and types of records needed in agricultural businesses (TM-5, 6, 7, 8, and 9). Secure examples of these records and as they are discussed, share and explain each type of record with the class.

2. Using ACT-10, have students post to the records of the Bayleen Farm Supply Store, the transactions of the business for the month May. When the students have completed ACT-10, review their work and discuss with them what the records show and their significance to the business. Duplicate the forms for this activity in numbers large enough to provide

each member of the class with adequate forms to complete the activity and to cover all transactions.

CONCLUSION:

Sources of assistance in recordkeeping.

Keeping records of business activities is very important. It can:

Provide a feeling for the importance of records.

Help run the business.

Provide a first hand look at how the business is operating.

Determine what items can be delegated to others.

Provide experience and knowledge to teach the system to others.

Trade associations or suppliers. They can provide guidelines or sample accounting records.

Local office supply stores.

Colleges business courses. They very often welcome the chance to use "real life" case studies. They can help in setting up a prototype record keeping system.

Government agencies. They not only offer classes in recordkeeping but provide consultant services. Two of the agences are the Small Business Administration and the Office of Minority Business of the Small Marketers Aids.

Accountants or accounting services.

Another option is the widespread use of the micro computer.

Requirements for good recordkeeping. VM-

Simple to use

Easy to understand

Reliable

Accurate

Consistent

Designed to provide information on a timely basis

Types of data can be provided by recordkeeping.

Sales - facts and figures are needed on:

- Summary of orders received
- List and condition of open orders
- Summary of sales and comparison with earlier records
- Analysis by area, product, and customer or type of customers
- Historical records for each customer, recognition of major customers
- List of potential customers
- Discount rates and terms for various customers
- Sales expense records, earnings, and percentage cost of sales for each salesperson

Warehouse and shipping control - requires the following:

- Receiving reports
- Receiving and placing into stock the production reports by packages and individuals
- Bills of lading and signed shipping documents
- Customer return reports
- Back order control documents

Quality control

Proportion of rejections from receiving and production departments (scrap, seconds, and rework)

Reasons for rejection, internal and external

Inventory control

Amount of stock on hand (raw materials, goods in process, fabricated parts, finished goods, consigned goods)

Amounts on order (either production in shop or purchase orders)

Rate of parts or product usage and turnover

Material requisitions

Purchasing

Purchase requisitions (vendor, receiving department, and office)

File of unfilled purchase orders

List of suppliers, costs, and terms of past purchases

File indicating when suppliers may have special offerings (important for retail, warehouse, and service industries)

Cost accounting

Labor, material, and overhead costs for each product or job lot

Gross profit by item (applicable to certain retail and wholesale industries)

Finance and credit

Monthly trial balance

Financial statements (profit-and-loss and balance sheets)

Cash position

Aging of accounts receivable and accounts payable

Credit limits for customers and collection system

Bookkeeping

Regular books of accounts: general ledger, accounts receivable ledger, accounts payable ledger, general journal, purchase journal, sales book, and cash book (or their equivalents)

Payroll information: paychecks, weekly payroll list, and individual annual earning statements

Types of records, journals, and ledgers should be used.

Inventory and purchasing - these records provide facts to help with buying and selling:

Inventory control record

Item perpetual inventory record

Purchase order file

Supplier file

Returned goods file

Price change book

Sales records - these records reveal facts to determine sales trends:

Record of individual sales transaction

Summary of daily sales

Sales plan

Sales promotion plan

Cash records - these records show what is happening to cash:

Daily cash reconciliation

Cash receipts journal

Cash disbursements journal

Bank reconciliation

Credit records.- These records keep track of who owes you and whether they are paying on time:

Charge account application

Accounts receivable ledger

Accounts receivable aging list

Employee records. These records maintain information legally required and are helpful in the efficient managament of personnel:

Record of employee earnings and amounts withheld

Employee's withholding exemption certificate (W-4)

Record of hours worked

Record of expense allowances

Employment applications

Record of changes in rate of pay

Record of reasons for termination of employment

Record of employee benefits

Job description

Crucial incidents record

Fixtures and property records. These keep facts needed for taking depreciation allowances and for insurance coverage and claim

Equipment record

Insurance register

Bookkeeping - these records, in addition to some of the above, are needed if you use a double-entry bookkeeping system:

General journal

General ledger

The words "journal" and "ledger" may not be used consistently or may even be used together. Even though the idea behind the recordkeeping system may be more important than the terms used, it is helpful to become familiar with the general use of each term. The word "journal" is used for records in which the original entry is made or posted. The word "ledger" is used for records that represent summaries or a running account of the income and expenses of the business.

Types of journals:

Daily sales and cash summary - is a summary amount of cash received, charge sales, and collections from accounts receivable

Accounts receivable - is your record of how much is owed to your business by credit customers

Accounts payable - is the record of amounts your business owes others for cash items

Payroll register - where you keep a recrd of hom much your employees have due them for work rendered

EVLAUATION:

Upon completion of this lesson, the student will be able to:

Identify the sources of assistance in recordkeeping.

Describe the requirements of good record keeping.

Identify the types of data that can be provided by recordkeeping.

Describe the uses and types of record, journals, and ledgers.

REFERENCES:

Keeping the Business Records, The National Center for Reserach in Vocational Education, The Ohio State University, Columbus, Ohio.

ABO-8

LINEVILLE FARM SERVICE CENTER
LINVEVILLE, IOWA

PURCHASE ORDER 2031

INFO-1

DATE / /

SHIP TO: Lineville Farm Supply
STREET
LOCATION Lineville, Iowa

☒ FOR RESALE INVENTORY
☐ FOR OVERHEAD EXPENSE

TO:
SUPPLIER Acme Fertilizer Co
ADDRESS
CITY, STATE Adalia, Iowa ZIP 13333

ORDERED QUANTITY	RECEIVED QUANTITY	PRODUCT DESCRIPTION	UNIT PRICE	TOTAL AMOUNT
6 T		10-10-5 Fertilizer	\$80	\$480
8 T		5-20-20 "	\$90	\$720
3 T		10-10-10 "	\$70	\$210

PARROTT & SONS CO., WATERLOO, IOWA EE 91

ORDERED BY J. J.
REC'D BY
DATE / /

ORIGINAL—NOT NEGOTIABLE

STRAIGHT BILL OF LADING—SHORT FORM

Shipper's No. 60

Frank's Trucking. (Name of Carrier) Carrier's No. 19

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

at Adalia, Iowa March 1 19 88 From Acme Fertilizer Co.

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official, Southern, Western and Illinois Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to Lineville Farm Service Center

(Mail or street address of consignee—For purposes of notification only.)

Destination Business State Ia County Decatur Delivery Address ★

(★ To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Route Direct

Delivering Carrier Truck No. 8 Car or Vehicle Initials ALTN No. 82018

No. Packages	Kind of Package, Description of Articles, Special Marks, and Exceptions	*WEIGHT (Subject to Correction)	Class or Rate	Check Column
160	50# bags 10-10-5 fertilizer			
360	50# bags 5-20-20 fertilizer			
120	50# bags 10-10-10 fertilizer			

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

per

†The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of the Consolidated Freight Classification.

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

If charges are to be prepaid, write or stamp here, "To be Prepaid."

Received $
to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per
(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

$

†Shipper's imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission.

Acme Fertilizer Co. Shipper, Per Agent, Per

1

Permanent post-office address of shipper

RECEIVING RECORD

64735

RECEIVED FROM Acme Fertilizer Co. DATE 3/4/88

ADDRESS Adalia Iowa OUR ORDER NO 2031

VIA Frank's Trucking. RETURNED GOODS ☐

FREIGHT BILL NO 82018 EXPRESS ☐ PARCEL POST ☐ PREPAID ☐ COLLECT CHARGES PAID $

	QUANTITY	STOCK NO.	DESCRIPTION
1	160		50# bags 10-10-5 fertilizer
2	360		50# bags 5-20-20 fertilizer
3	120		50# bags 10-10-10 fertilizer
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

NUMBER OF PACKAGES	WEIGHT	CONDITION	DELIVERED TO
640	32000#	Good	

REMARKS

CHECKED WITH PURCHASE ORDER BY LMR

CREDIT MEMO ISSUED BY

RECEIVED BY

ORIGINAL

INVOICE

ACME FERTILIZER CO.
Adalia, Iowa

NO. 114572

DATE 3/1/88

SOLD TO Lineville Farm Supply Center
Lineville, Iowa 68411

SHIPPED TO Lineville Farm Supply
Lineville, Iowa

YOUR ORDER NO. 2031	OUR ORDER NO. 682115	SALESMAN Smith	
DATE SHIPPED 3/1/88	SHIPPED VIA Frank's Towing	F.O.B.	TERMS P. O. D.

QUANTITY ORDERED	QUANTITY SHIPPED	STOCK NUMBER/DESCRIPTION	PRICE		PER	AMOUNT	
6T	6T	10-10-5 fertilizer	$80	-	T	$480	-
8T	8T	5-20-20 "	$90	-	T	720	-
3T	3T	10-10-10 "	70	-	T	210	

GrayLine FORM 44-402 4-PARTS

ORIGINAL

WILSON JONES COMPANY • © 1961 • PRINTED IN U.S.A.

Sources of Records

- Accountant
- Colleges
- Trade Associations
- Micro-computers
- Governmental Agencies
- Office Supply

REQUIREMENTS FOR GOOD RECORD KEEPING

- CONSISTENT
- ACCURATE
- RELIABLE
- EASY TO UNDERSTAND
- SIMPLE TO USE
- PROVIDE DATA ON A TIMELY BASIS

RECORDS CAN PROVIDE

SALES INFORMATION

WAREHOUSE AND SHIPPING CONTROL

FINANCE AND CREDIT

BOOKKEEPING TRIAL BALANCE

QUALITY CONTROL

INVENTORY CONTROL

PURCHASING INFORMATION

COST ACCOUNTING INFORMATION

TYPES OF RECORDS NORMALLY KEPT

- PERPETUAL INVENTORY RECORDS

- SALES RECORD

- CASH RECORD

    A. Cash receipts journal
    B. Cash dispersements journal

- CREDIT RECORDS

    A. Accounts receivable
    B. Accounts payable

- EMPLOYEE RECORDS

- FIXTURES RECORDS

- GENERAL JOURNAL RECORDS

TYPES OF RECORDS, JOURNALS, & LEDGERS

- INVENTORY AND PURCHASING RECORDS
- SALES RECORD
- CASH RECORDS
- CREDIT RECORDS
- EMPLOYEE RECORDS
- FIXTURE AND PROPERTY RECORDS
- DAILY SALES AND CASH SUMMARY JOURNALS
- ACCOUNTS RECEIVABLE LEDGER
- ACCOUNTS PAYABLE LEDGER
- PAYROLL REGISTER

Bayleen Farm Supply Center

Transactions for the Month of May

This is a record of the business transactions of a number of customers at the Bayleen Farm Supply Center. There are sales tickets, account records, inventory records for each of these transactions.

There are daily cash balances to be made, checks to be written, and bank deposits to be made just as might be done in a typical agricultural business.

Your first step in starting should be to complete the inventory form. The "No. of Units" and "Amount" columns need to be completed. Next, figure the prices for your price list. Use the percentages indicated on the price list for calculating the markup for each of the various kinds of merchandise. Use the unit price listed on the end of the month inventory form as the cost price.

The next step will be to start the perpetual inventory sheet. On the first line of this sheet enter the units on hand from the actual count column from the end of the month inventory.

Bayleen Farm Supply

Supply Price List

Figure the prices on the items for sale. Use the percentage markup indicated below and apply this to the unit price on the inventory seet. Bushes of grain will have to be changed to cwt. Figure the selling prices to the nearest 5 cents. There will be some price changes during the month. Put these in the column provided here for price changes.

Fertilizer	16%	Seed	17%
Grain	10%	Twine	21%
Feed	23%	Chemicals	30%
Oil and grease	25%		

Grains	Price	Price Change
Shelled corn (cwt)		
Oats (cwt)		
Feeds:		
Pig starter (cwt)		
Pig grower (cwt)		
Pig finisher (cwt)		
Dairy Supplement (cwt)		
Soybean meal (cwt)		
Linseed meal (cwt)		
Beef grower (cwt)		
Beef finisher (cwt)		
Calf starter 50#		
Bran (cwt)		
Mineral 50# bag		
Mineral blocks, each		
Salt blocks, each		
Fertilizer:		
6-24-12 (per ton)		
5-20-20 (per ton)		
33-0-0 (per ton)		

Seeds:

Ryegrass (per lb.)		
Bromegrass seed (per lb.)		
Alfalfa seed (per lb.)		
Red clover seed (per lb.)		
Sweet clover seed (per lb.)		
Seed corn (per lb.)		

Chemicals:

Weed-Be-Gone (per gal.)		
Atrazine (5# bag)		
Fly spray (1 qt.)		

Oil and Grease:

Motor oil (1 qt)		
Motor oil (1 gal)		
Lube tubes (1#)		
Grinding (per cwt)	.30	
Shelling (per cwt)	.20	

Discount schedule:

For lots of feed or grain (a ton or one kind, allow $2.00 per ton discount.

For baler twine allow 10 cents per bale discount on sales of 10 bales or more.

For fertilizer allow a discount of:

$2.00 per ton on orders from 5 through 9 tons.
$4.00 per ton on orders of 10 tons or more.
(This can be a combination of analyses to make up the tonnage.)

Bayleen Farm Supply Center

Month of May Transactions

May 1 Brian Smith (cash) purchased 5 sacks of beef grower, 5 gal. motore oil, 5 bales twine, and 5# bluegrass seed.

Harry Doud (charge) bought 3 tons 6-24-12 and 4 tons 5-20-20 fertilizer

Jim Grey (charge) bought 2 tons 5-20-20 and 1 ton 33-0-0 fertilizer, 5 bags of seed corn, and 1 qt. household fly spray.

Larry Reding (cash) had a load of grinding that weighed 2460#. He added to the grinding: 1000# dairy supplement, 300# bran, and 150# mineral. He took home 150# pig starter, 50# of calf starter and 2 blocks of salt.

A load of fertilizer came in from the MIRACLE PLANT FOOD COMPANY. (Write a check for this and add to inventory.) 10 tons 6-24-12 @ $81, 7 tons 5-20-20 @ $92, and 3 tons 33-0-0 @ $107.

May 2 James Greer (charge) purchased 10 bales of baler twine, 5# lawn seed, 2 salt blocks and 2 mineral blocks.

Tod Jones (cash) brought in a load of ear corn to be stored. The weight of the load of corn was 15,720#. It shelled out at 81% shelled corn. This corn will go on an account card for Tod Jones but will not go into the inventory of the company. Make a sales slip for the shelling and sales slip for the pounds of corn to go in the bank.

Steve Rante (charge) bought 1000# shelled corn (corn was ground) and 300# pork grower.

Al Grey (charge) bought 4 tons 33-0-0, 13 bu. seed corn, and 3 5# bags of Atrazine.

Harry Doud (check) on account paid $300 on his fertilizer bill.

A bank deposit was made on this date: $200 in bills plus all the checks that were on hand May 1 plus the $200 check from Harry Doud.

May 4 Wilson Karnes (paid by check) brought in a load of corn to be ground for hog feed. The load weighed 9255# and shelled out at 80%. He added to the corn: 800# pork grower and 50# mineral. He bought: 20# red clover seed, 30# alfalfa seed, and 2 qt. motor oil.

James Greer (charge) bought 1 ton porkgrower, 500# soybean meal, 300# linseed meal, and 3 salt blocks.

Jim Grey (paid by check) bought 2000# oats and had this ground with 1800# of his ear corn, 500# dairy supplement, 200# bran and 10 balls of baler twine. He also paid by check $50 on his account.

After looking at the inventory sheet for this day the manager decided that he should order some feed, seed, and twine. Make purchase orders for the following items:

From the Coopers Feed Co (Purchase Order No. 1) 2 tons beef grower @ $125, 3 tons pork finisher @ $135, and 1 ton dairy supplement @ $115.

From the Vitality Seed Co. (Purchase Order No. 2) 50# lawn seed @ $1.25 per lb. and 25 bu. seed corn @ $45 a bu.

From the Acme Twine Co. (Purchase Order No. 3) 50 bales baler twine @ $15.00.

These supplies are to be shipped by truck and you need them within one week. They are to be paid for within 10 days. you sign as the buyer.

May 5 Wilson Karnes (charge) took 3000# of shelled corn from his grain bank and had this ground. He added 500# pork finisher and 100# mineral. He took home 100# ryegrass for pasture and 10 1# lube tubes for machinery.

Larry Reding (charge) bought 5 tons shelled corn, 5 bu. seed corn and 5 1 gal. oil for tractors.

Steve Rante (charge) bought 1200# shelled corn and 800# oats that he had ground

May 6 Harry Doud (charge) bought 1 ton shelled corn, 1/2 ton beef grower, 3 blocks salt, 1 qt household fly spray, and 2 qt. oil for tractor. He paid by check the balance of his fertilizer bill.

Brian Smith (charge) bought 1 ton 33-0-0 fertilizer, 5 bu. seed corn, 1 5 gal. Weed-Be-Gone and 3 5# bags Atrazine.

Al Grey (cash) bought 4 bags seed corn and 2 1 gal. Weed-Be-Gone.

Todd Jones (charge) bought 4 tons 6-24-12 and 2 tons 5-20-20 fertilizer and 5 bales baler twine.

May 7 Todd Jones brought in a load of ear corn to sell and put on his account. This load of corn weighted 14,505#. He was not charged for shelling because he is selling it. Ear corn is worth $2.20 per hundred. The office wrote him a check for this so that it would bse on their records and then he endorsed the check and gave it back to them to apply on his account. Be sure to make the following entries (make out sales slup for the transaction):

(check) Credit account from corn
Shelled corn for inventory (80% shell-out)
Check written to Todd Jones

Al Grey (cash) bought 3# lawn seed and 2# sweet corn seed.

James Greer (charge) bought 5 tons 6-24-12 fertilizer.

The feed from Purchase Order No. 1 arrived. The manager sent a check back with the driver. You sign the check as manager. Write check and enter in inventory.

May 8 Robert Brown (charge) bought 1 ton beef finisher, 2 tons shelled corn, 1 ton oats, 700# soybean meal, 600# bran, and 600# linseed meal

Larry Reding sold a truck load of oats to the elevator. The load weighted 9345#, and the price of oats is $1.40 per bushel. The office wrote a check for this. He endorsed this and turned it in on his account. Make out sales slip for the transaction and add to the inventory.

Steve Rante (charge) bought 1 ton 5-20-20 fertilizer, 400# 33-0-0 and 3 bags seed corn.

May 9 From the inventory records the manager saw that he should order another load of fertilizer, so he filled out the Purchase Order No. 4 for the Miracle Plant Food Co. for: 8 tons 6-24-12 @ $81, 7 tons 5-20-20 @ $92, and 5 tons 33-0-0 @ $107.

Brian Smith (charge) bought 1 ton pork grower, 5 gal. motor oil, and 5 bales twine and (check) paid $100 on his account.

Jim Grey (cash) bought 10 bags of seed corn, 1 gal. Weed-Be-Gone, 1 qt. fly spray, and 5 qts. motor oil for lawn mowers.

Larry Reding (charge) bought 150# ryegrass seed to plant in corn field and 2 bags 5-20-20 fertilizer (50# bags).

A bank deposit was made with $180 in cash and all the checks taken in from May 4 through May 9.

May 11 Robert Brown (charge) bought 6 tons 5-20-20 and 2 tons 6-24-12 fertilizer and 5 bags of seed corn.

James Greer (check) paid $500 on his account (prepare a sales slip)

Harry Doud (charge) bought 1000# soybean meal, 500# linseed meal, 2 blocks salt, and 15# alfalfa seed.

Al Grey (charge) bought 1800# oats and had this ground, 400# pork finisher, 400# mineral, 3 bags calf starter, and 5 bales twine.

The seed came in from Purchase Order No. 2. A check was written for this amount.

There was a trucking charge of $15 on this seed which was paid out of the cash register in CASH to the driver.

May 12 Wilson Karnes (charge) bought 1 ton 5-20-20 fertilizer, 2 gal. Weed-Be-Gone and 10 bu. seed corn.

The fertilizer came in from Purchase Order No. 4. A check was written for this and sent with the driver.

Brian Smith (charge) had a load of grinding. He purchased 5420# grinding, 500# soybean meal, 300# bran, and 30# mineral.

Larry Reding (cash) bought 5# lawn seed.

Todd Jones (charge) took 4000# of corn from the grain bank and ground with 700# pork finisher and 150# mineral, 20# ryegrass and 30 # of red clover, and 10 bales of twine.

The twine came in from Purchase Order No. 3. A check was written and sent to the company.

The manager decided to get a load of feed. Make a purchase order for (No. 5) (use unit price from inventory sheet) 4 tons soybean meal, 3 tons linseed meal, 1 ton bran, and 1 ton mineral.

This was picked up by a Bayleen Farm Supply Center truck from the Coopers Feed Co.

The manager sent a check along with the driver. Make out this check and you sign it as manager.

Steve Rante (check paid $100 on his account.

Harry Doud (cash) bought 1 5 gal. Weed-Be-Gone.

May 14 James Greer finished planting corn and had a few bags of fertilizer left. He did not want these lying around until next year so he brought them back to the elevator. He returned 8 bags (50#). To make it easy the manager figured what he had paid for these and paid him cash for them (CASH OUT). Look up the kind of fertilizer that Mr. Greer had purchased and figure how much cash he would get back. Add to inventory.

James Grey (check) paid balance on account.

Robert Brown bought a 5-ton load of shelled corn. The manager told him he would give him a 3% discount in addition to the tonnage discount if he paid for it today. Mr. Brown then wrote a check for the amount of this corn.

Steve Rante (charge) had a load of grinding 2136# and bought 200# dairy supplement, 200# bran, 50# mineral, and 1 bag calf starter.

Brian Smith (charge) bought 1 ton 5-20-20 fertilizer.

May 15 James Greer (charge) bought 500# oats, 500# beef grower, 200# bran and 3 blocks salt. He also wrote a check for $100 to be applied on his account.

Harry Doud (charge) bought 4 tons shelled corn, 1 ton beef grower, and 5 gal. oil for tractors.

Al Grey (cash) bought 5 bales twine.

George Karnes (charge) bought 1/2 ton soybean meal, 1/2 ton dairy supplement, 300# mineral, 4 sacks calf starter.

May 16 Before any charges were made for the 16th, the manager wanted to know what the total amount in the accounts receivable was as of the end of the May 15 business day. He asked the office clerk to get this figure to him. Find this figure by taking the outstanding balace on accounts at the beginning of the month plus the current balance on all accounts receivable ledger cards.

Larry Reding (charge) bought 1 5 gal Weed-Be-Gone, 2 lube tubes for garden tractor, and 30# bromegrass seed.

Jim Grey (charge) bought 1000# soybean meal, 400# linseed meal, and 2 bales twine.

Todd Jones (check) paid $140 on his account.

A bank deposit was made on this date. This included $200 in cash and all checks taken in from May 11 to May 16, inclusive.

May 18 Salesman Al Day, who sells petroleum and chemical products for the Ace Chemical Company, stopped in. After looking at the inventory record the manager decided to order some things from him. Make up Purchase Order No. 6 for the following items (use unit price on inventory for cost price). 8 5 gal. Weed-Be-Gone, 15 qts. fly spray, 30 1 gal. motor oil, and 36 lube tubes. This is to be shipped within one week by Commercial Freight Truck Lines.

Robert Brown (charge) bought 1 ton shelled corn, 1/2 ton pork grower, and 300# soybean meal and (check) paid $350 on his account.

Todd Jones brought another load of corn in for the grain bank. This load weighed 11,538# and shelled out at 82%. He was charged for the shelling and the shelled corn placed in the grain bank.

Harry Doud (charge) bought 5 gal. Weed-Be-Gone.

May 19 The manger decided to order a load of commercial feed. Make out Purchase Order No. 7 for these items. (Use inventory unit price.) 3 tons beef grower, 2 tons pork grower, and 1 ton dairy supplement. Since he is low on the beefmaker he decides to sent a business truck for it today. He sends a check with the truck driver for the feed made out to the Cooper Feed Co. The driver had to buy $15 worth of gasoline to make the trip. He paid for the gasoline and the manager gave him $4 cash out of the cash register (Cash Out).

Jim Gray (charge) bought 1000# shelled corn, 1000# oats and had these ground, 200# soybean meal, 200# linseed meal, and 50# mineral.

Jim Gray (cash) bought 4# lawn seed.

Brian Smith (check) paid $250 on his account.

Larry Reding (charge) bought 500# pork finisher, 200# bran, and 3 bags calf starter.

May 20 James Greer (charge) bought fertilizer for late planting of corn: 1 ton 6-24-12, 1ton 5-20-20, and 3 bu seed corn.

Steve Rante (charge) had 2180# load of grinding, 300# pork finisher, 20# mineral, 2 salt blocks and 1 qt. fly spray.

Jim Gray (charge) bought 500# pork finisher, 300# soybean meal, 200# bran, and 50# mineral.

Todd Jones (cash) bought 1 5# Atrazine and 2# lawn seed.

Brian Smith (charge) bought 2 bales twine, 10# alfalfa seed, 3# sweet corn seed.

May 21 There have been some changes in feed prices so the manager changes his prices. Even though he has just purchased a load of feed two days ago, he must reduce his prices according to the market to meet competition. Use the following prices and figure the percentage for feeds and chage these prices on your price list (to the nearest 5 cents).

Beef grower	$130
Pork grower	145
Dairy supplement	120
Soybean meal	115
Linseed meal	140

Robert Brown (charge) bought 2 5# Atrazine, 500# soybean meal, and 2 bags calf starter.

Harry Doud (check) paid $350 on his account - prepare sales slip.

Todd Jones (charge) took 2000# of corn from the grain bank for grinding. He added 500# soybean meal, 400# oats, and 200# bran to the corn. He took home one block salt.

May 22 The material came in from Purcahse Order No. 6 from the Ace Chemical Co. A check was written for this order. You sign as manager.

Steve Rante sold a load of corn to the elevator. He needed the money so he did not leave any of this on his account. A check was written to him for it. The load weighed 10925# (ear corn) and the price of ear corn was $250. The corn shelled out at 80%. Put in inventory.

Brian Smith (charge) had a load of grinding: 4810# grinding, 800# pork finisher, 100# mineral, and 2 bags calf starter.

Robert Brown (cash) bought 10 bags 5-20-20 fertilizer to finish planting corn.

Larry Reding (charge) bought 1000# shelled corn, 500# soybean meal, and 10# ryegrass to seed around the barn yard.

May 23 Jim Gray (check) paid balance on his account.

James Greer (charge) bought 5 tons shelled corn, 150# soybean meal, 700# linseed meal, and 5 bales twine.

Harry Doud (charge) bought 2 5# Atrazine, 1 5 Gal. Weed-Be-Gone.

Al Grey (cash) bought 3 qts oil, 1 qt. fly spray.

A bank deposit was made. There was not much cash in the register so this deposit was only checks from May 18 to May 23, inclusive.

May 25 Robert Brown (charge) bought 2 tons shelled corn, 1 ton oats, 1 ton beef grower, 500# mineral.

James Greer (charge) bought 10 gal. of oil and 10 lube tubes.

This late in the season the elevator was overstocked with fertilizer so the manager offered to sell some fertilizer at a reduced price. For 3 tons or more he would allow an additional 5% discount besides the tonnage discount, and another 2% discount if it were paid for not. (Figure tonnage discount fist, then %5, then 2%.)

Todd Jones (check) took advantage of this offer and bought 3 tons 6-24-12 and 3 tons 5-20-20 fertilizer. He wrote a check for this purchase.

Steve Rante (check) bought 2 tons 6-24-12 and 1 ton 5-20-20 fertilizer. This qualified for the 5% and 2% but not the tonnage discount.

Jim Grey (cash) had a lod of grinding: 2380# grinding, 500# pork finisher, 50# mineral.

May 26 Al Grey (charge) bought 1/2 ton beef finisher, 500# bran, 3 bags calf starter, and 100# mineral.

Wilson Karnes (charge) bought 3 tons 6-24-12 and 2 tons 5-20-20 fertilizer. He bought on the special deal but he did not have the money to pay now so did not get the 2% discount.

Larry Reding (charge) bought 5 gallons Weed-Be-Gone.

Harry Doud (check) paid the balance on his account -- prepare sales slip.

Steve Rante (charge) had a load of grinding: 1590# grinding, 300# oats, 200# bran, 500# linseed meal, 50# mineral, and 8 bales twine.

May 27 Brian Smith (charge) bought 2 tons of oats, 1/2 ton beef finisher, 4 bags calf starter, and 2 5# bags of Atrazine.

The seed company said that they would take back any seed corn that the manager did not want to keep. They would pay the same price as the elevator had paid for it. (check) The manager decided to send back 20 bushels.

Robert Brown (charge) bought 7 bales twine.

Todd Jones decided to take some of the corn from his grain bank and apply it on his account. He decided to sell 6000#. The price of corn is now $2.80 per 100# ear corn. Convert this price to shelled corn, write him a check for it, and he will endorse the check back for his account. (Take from grain bank and add to inventory.) (check) on account.

James Greer (charge) bought 2 tons shelled corn, 1/2 ton pork finisher, 500# linseed meal.

May 28 Todd Jones (charge) took corn from the grain bank for grinding: 2000# grinding, 400# pork finisher, 100# mineral, 2 salt blocks.

Harry Doud (cash) bought 3 qts. oil and 1 qt. fly spray.

Steve Rante (charge) bought 6 bales twine.

Al Grey (charge) bought 500# dairy supplement, 500# linseed meal, 300# bran, 200# mineral and 5 gal. Weed-Beo-Gone.

Wilson Karnes (cash) bought 5 bales twine and 5 gal. oil.

Robert Brown (check) bought 3 tons 33-0-0 on the discounted pricing.

May 29 Larry Reding (charge) bought 1/2 ton oats, 500# dairy supplement, 300# bran, 50# mineral, 2800# grinding and 3 1 gal. Weed-Be-Gone

James Greer (check) decided to sell some wheat to pay on his account. He brought two loads. The two loads weighed as follows:

8854#	58#	14.2%(3 cent discount)
6420#	56#	13.8%(3 cent discount)

The base price for wheat is $2.80 per bu.

Write out a grain settlement check for the wheat which he will endorse and turn back in on the account.

Brian Smith (check) paid $250 on account.

May 30 Harry Doud (cash) bought 5 bales twine.

Steve Rante (charge) had a load of grinding; 3294# grinding, 300# soybean meal, 400# lineseed meal, 150# mineral, and 1 salt block.

Al Grey (charge) bought 5 gal. oil.

Wilson Karnes bought 500# beef finisher, 300# linseed meal, 100# mineral, and 1 salt block.

Jim Grey (charge) bought 1 bu. seed corn, 1/2 ton 5-20-20 fertilizer at regular price, and 2 1 gal. Weed-Be-Gone.

Make a bank deposit, $100 in cash plus all the checks taken in from May 25 to May 30, inclusive.

Develop new end of month inventory.

Paid employee salaries.

Secretary	$720 plus 1/2 social security @ 8.75%
Jim Green	160 hrs. @ $7.20/hr. plus social security
Robert Slack	160 hrs. @ $6/hr. plus social security.
John Jurgens	160 hrs. @ $9/hr. plus social security.

Figure the amount to be paid each employee, post to employee records and write checks.

BAYLEEN FARM SUPPLY CENTER

End of Month Inventory -- April

Actual Count at Locations			Description of Items	Unit	No. of Units	Unit Cost		Amount	
		83300#	No. 2 Shelled Corn	Bu		$2	10		
		11600#	Oats	Bu		1	60		
			FEED						
	3000#	4500#	Pig starter	50#		5	20		
	5000#	3600#	Pig grower	Ton		140	00		
	3800#	1600#	Pig finisher	Ton		135	00		
	1800#	2800#	Dairy Supplement	Ton		115	00		
1500#	3000#	1000#	Soybean meal	Ton		110	00		
		3500#	Linseed meal	Ton		135	00		
	4000#	2000#	Beef grower	Ton		125	00		
	6000#	2800#	Beef finisher	Ton		140	00		
		50	Calf starter	50#		7	20		
3000#			Bran	Ton		65	00		
		45	50# bags Mineral	Ea.		12	00		
		30	Mineral blocks	Ea.		16	00		
		28	Salt blocks	Ea.		8.	60		
			FERTILIZER						
	128		50# bags 6-24-12	Ton		81	00		
	480		50# bags 5-20-20	Ton		92	00		
	60		50# bags 33-0-0	Ton		107	00		
			SEED						
600#			Ryegrass seed	lb.			60		
1000#			Bromegrass seed	lb.			90		
500#			Alfalfa seed	lb		4	60		
600#			Red Clover seed	lb		3	90		
200#			Sweet Clover seed	lb		4	00		
60#			Bluegrass seed	lb		1	25		
1200#			50# bags seed corn	Ea.		65	00		
30#			Sweet corn	lb.		7	50		
			OIL AND GREASE						
50			1 qt. Motor Oil	Ea.		1	20		
23			1 gal. Motor Oil	Ea		2	25		

BAYLENE FARM SUPPLY CENTER

End of Month Inventory -- April

Actual Count at Locations			Description of Items	Unit	No. of Units	Unit Cost		Amount	
30			1# Lube tubes	Ea.		$1	20		
			TWINE						
120			Bales baler twine	Ea.		15	00		
			CHEMICALS						
	85		5# bags Atrazine	Ea.		18	00		
	63		1 qt. Weed-Be-Gone	Ea.		13	50		
	83		1 qt. Fly spray	Ea.		11	50		

BAYLEEN FARM SUPPLY CENTER

End of Month Inventory --› May

DETERMINING NECESSARY SELLING PRICE

ITEM	Unit	Total Cost Per Unit	% Gross Margin	Selling Price

PURCHASE ORDER

NO.____________________

TO__________________________________ DATE____________19____

ADDRESS____

SHIP TO____

ADDRESS____

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT

OUR ORDER NUMBER MUST APPEAR ON INVOICES, PACKAGES AND CORRESPONDENCE ACKNOWLEDGE IF UNABLE TO DELIVER BY DATE REQUIRED.

____

Buyer_________________________

FORM 44-110 DUP. U.S.A.
44-111 TRIP.

ORIGINAL

169

BAYLEEN FARM SUPPLY CENTER PERPETUAL INVENTORY

ABO-8

Month________________________

date	BEGINNING OF THE MONTH BALANCE														
	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															

ACT-10t

BAYLEEN FARM SUPPLY CENTER DAILY SALES RECORD

TOTAL OF DEPARTMENTS MUST EQUAL TOTAL SALES

ABO-8

Totals																					

ACT-10u

DAILY CASH SLIPS

Date ____________
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Date ____________
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ____________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Date ____________
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ____________
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance------------- ______

Date ____________
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ____________
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------- ______

Date ____________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Bayleen Farm Supply Center

Ponca, Iowa

NO________

Date______________________, 19____

PAY TO THE
ORDER OF____$__________

____DOLLARS

THE SAVINGS DEPOSIT BANK CO.

56-568
412

C O P Y

- -

Detach Before Cashing

BAYLEEN FARM SUPPLY CENTER
Ponca, Iowa

DATE RECEIVED	SCALE TICKET NUMBER	STORED	KIND	TEST WEIGHT	MOISTURE TEST	WEIGHT	BASE PRICE	DISC.	NET PRICE	AMOUNT	REMARKS

$

LESS: TRUCKING $__________

STORAGE __________

OTHER DEDUCTIONS______________________________ __________ __________
DETAIL HERE

AMOUNT OF CHECK $__________

WEIGH BILL

n.

Kind Sold ☐ Stored ☐ Del. on Contract ☐ Date

Patron Truck License No.

Address

37802

Gross lbs.	OTHER Discounts	Price $
Tare lbs.	Weight Moisture	Disc.-Prem. $
Net lbs.	Trucking	Net Price $
Dockage lbs.	Driver ☐ ON ☐ OFF	Amount $
Net lbs.	Weigher	Check No.

COOP-183-F

n.

Kind Sold ☐ Stored ☐ Del. on Contract ☐ Date

Patron Truck License No.

Address

37802

Gross lbs.	OTHER Discounts	Price $
Tare lbs.	Weight Moisture	Disc.-Prem. $
Net lbs.	Trucking	Net Price $
Dockage lbs.	Driver ☐ ON ☐ OFF	Amount $
Net lbs.	Weigher	Check No.

COOP-183-F

n.

Kind Sold ☐ Stored ☐ Del. on Contract ☐ Date

Patron Truck License No.

Address

37802

Gross lbs.	OTHER Discounts	Price $
Tare lbs.	Weight Moisture	Disc.-Prem. $
Net lbs.	Trucking	Net Price $
Dockage lbs.	Driver ☐ ON ☐ OFF	Amount $
Net lbs.	Weigher	Check No.

COOP-183-F

BANK DEPOSIT SLIPS

DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY____________________

____________________ 19____

[illegible]

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY____________________

____________________ 19____

[illegible]

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

BEST COPY AVAILABLE

ABO-8

ORIGINAL—NOT NEGOTIABLE

STRAIGHT BILL OF LADING—SHORT FORM

Shipper's No.__________

____________________ Carrier's No.__________

(Name of Carrier)

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

at __________ 19 ____ From __________

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official, Southern, Western and Illinois Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to____________________

(Mail or street address of consignee—for purposes of notification only)

Destination__________ State__________ County__________ Delivery Address ★__________

(★ To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Route____________________

Delivering Carrier__________ Car or Vehicle Initials__________ No.__________

No. Packages	Kind of Package, Description of Articles, Special Marks, and Exceptions	*WEIGHT (Subject to Correction)	Class or Rate	Check Column

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

____

(Signature of Consignor)

If charges are to be prepaid, write or stamp here, "To be Prepaid."

____

Received $__________
to apply in prepayment of the charges on the property described hereon.

____

Agent or Cashier

Per____________________
(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

$ ____________________

†Shipper's imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission.

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

__________ per __________

†The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of the Consolidated Freight Classification.

____________________ Shipper, Per____________________ Agent, Per____________________

1

Permanent post-office address of shipper

175

ACT-10z

BEST COPY AVAILABLE

176

RECEIVING RECORD

64735

RECEIVED FROM ______________________ DATE ______________

ADDRESS ______________________ OUR ORDER NO. ______________

VIA ______________________ RETURNED GOODS ☐

FREIGHT BILL NO ____________ EXPRESS ☐ PARCEL POST ☐ PREPAID ☐ COLLECT CHARGES PAID $ ____________

	QUANTITY	STOCK NO.	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

NUMBER OF PACKAGES	WEIGHT	CONDITION	DELIVERED TO

REMARKS ______________________

CHECKED WITH PURCHASE ORDER BY

CREDIT MEMO ISSUED BY

RECEIVED BY ______________________

ORIGINAL

EMPLOYEE'S EARNINGS RECORD

NAME____________________ SINGLE__________ MARRIED__________

ADDRESS____________________ SOCIAL SECURITY NO.__________

____________________ POSITION__________

NO. OF EXEMPTIONS__________ WAGES__________ O/T WAGE__________

PAY PERIOD ENDING	GROSS PAY		FICA		FEDERAL INCOME TAX		HEALTH INS.		DISABILITY INS.		RETIREMENT	
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
TOTAL												

SUMMARY

QUARTERS	TOTAL PAY		FICA		FEDERAL INCOME TAX		HEALTH INS.		DISABILITY INS.		RETIREMENT	
FIRST												
SECOND												
THIRD												
FOURTH												
TOTAL FOR YEAR												

PROBLEM AREA 9

HOW ARE COMPUTERS USED IN AGRICULTURAL BUSINESSES?

Contents

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Problem 9: How are computers used in agricultural businesses?

Interest Approach:

As a class, visit several agricultural businesses in the community that use computers to conduct their business. Have a person employed in each business explain how computers are used in the business and demonstrate several of its uses. Have each student summarize their observations in a two page written paper.

Study Questions:

1. What ways are microcomputers used in agricultural businesses?
2. Why are microcomputers helpful to agricultural businesses?
3. What terms must one be familiar with when operating a microcomputer?
4. What are the major components of a microcomputer and their functions?
5. How are microcomputers properly cared for and maintained?
6. How should a floppy diskette be handled?
7. What type of software is used in an agricultural business and what are the ethics of copying a disk?
8. How can a spreadsheet program be used in an agricultural business?

Learner Needs:

Many student learner needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the student learning activities.

Develop career awareness. Interest approach.

Use human relations and communicative skills in social interaction. Student Learning Activity #1.

Basic Skills:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the student learning activities.

Ability to express feelings. Student Learning Activity #1.

Use of averages in interpreting and solving problems. Student Learning Activity #5.

Thinking Skills:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the student learning activities.

Distinguish between verifiable facts and value claims. Student Learning Activity #2.

Determine the accuracy of a statement. Student Learning Activity #4.

Student Learning Activities:

1. Discuss ways microcomputers are used in agricultural businesses (TM-1). Divide the school district into sections and assign a group of students to each section. Have the student groups survey all the businesses in their areas to determine how computers are used in each business using ACT-2. When the surveys are finished, summarize the groups results and

compare computer uses by nonagricultural and agricultural businesses.

2. Hand out to the class the list of computer terms and definitions (INFO-3). Bring a computer and software to class and as the terms are discussed, show and/or demonstrate them on the computer. Have students study the terms. When they are ready, divide the class into two groups and conduct a definition spelldown among the two groups. Review and discuss the major components of the microcomputer using TM-4.

3. Review and discuss how to handle floppy disketts (TM-5). Hand out ACT-6 and have them properly label the pictures.

4. Review and discuss TM-7 about sources of microcomputer software. Hand out INFO-8 and have each student select one vendor. Have them write to the vendor asking the vendor to send information on the software available through their company. Compile vendor responses and give each student a copy of the compiled results.

5. Pair up students in the class and provide each pair of students with a computer. Hand out and explain INFO-9. Hand out and have students complete ACT-10. Supplement their work in ACT-10 with TM-11, 12, 13, 14, 15, 16, and 17.

Conclusions:

Ways microcomputers are used in agricultural businesses.

- Provide financial recordkeeping
    - Monthly and annual reports
    - Customer financial reports
    - Tax reports
    - Profitability reports
- Provide inventory information

- Orders new stock when needed
- Maintains a daily inventory report
- Lowers inventory needs and investment
- Maintains higher quality products by producing faster item turnover.

Provide for in-house recordkeeping

- Payroll
- Department transfers
- Employee schedules
- Employee purchases

Provide customer services and communication

- Itemized billing
- Quicker credit analysis
- Fast service by identifying item on hand and location
- Word processing
- Direct mailings of advertisements

Provide tax accounting services

- Social security records
- Sales tax records
- Income records
- Expenditure records
- Financial summary

Control equipment

- Heating and air conditioning
- Lights
- Security system
- Specific equipment used in the business

Special applications specific to the business

- Formulates feed rations
- Calculates pesticides and fertilizer rates
- Provides information to warehouses for rapid ordering
- Provides market new and reports

Reasons why microcomputers are helpful to an agricultural business.

Determine the profitability of goods and services.

Process income tax financial reports.

Help verify information needed to establish credit and/or make investments.

Help in making decisions.

Improve the efficiencey of providing data to customers.

Control equipment and facilities.

Improve the profit margin.

- Improves effectiveness of using existing labor.
- Controls inventory closely which reduces the amount of stock, lowering the amount of interest paid to suppliers.
- Identifies customers with bad credit ratings.

Improves employee accuracy.

Provides information that helps eliminate items seldom sold.

Computer terms and definitions.

Computer terms are listed and defined in INFO-3.

Major components of the microcomputer and their funcitions
The more familiar one is with these components, the easier it will be to operate the computer in an agricultural business.

Keyboard -- used to input data

Processor -- processes data which is fed into system.

Monitor -- displays output.

Disk drive -- reads and/or writes data onto floppy diskette.

Printer -- outputs data onto paper.

Processing system components and their characteristics

Central processing unit (CPU)

Made up of multiple integrated circuits

Performs all operations on the data

Arithmetic - addition, subtraction, multiplication, division, exponentiation.

Logic - greater than, less than, equal to, not equal to

Controls the functions of all other parts of the computer.

Random access memory (RAM)

Made of integrated circuits

RAM memory is accessed by the CPU

Data entered into the computer by the keyboard or floppy diskette is stored in RAM

Will lose all stored data when electrical power is shut off.

Read only memory (ROM)

Made of multiple integrated circuits

Used to store data that does not change such as operating information.

Data entered into the computer by manufacturer

Will retain data at all times

Controller cards

Made of small circuit boards

Inserted into slots inside of computer

Serve numerous jobs such as interfacing printers and disk drives and providing different programming languages.

Power transformer

Changes the current of 110-120 volts to a voltage that the computer can handle.

Computer uses small amount of amperage and can be left on for long periods of time without damage. However, print left on the monitor for long periods of time can damage the monitor.

Parts of the Apple IIe keyboard and their funcitions.

Shift keys - found on the lower left and lower right side of the keyboard; allows the use of the upper symbols on keys with two symbols and the upper case letter on computers that have lower and upper case letters.

Return key - enters response for interpretation.

Control key - causes certain other keys to have and perform third functions by holding the control key down while pressing and releasing the other key.

Reset - used only to correct problems which have caused the computer to hang up or suspend operation.

Repeat function - The Apple IIe has a repeat function built in by depressing and holding the desired key down. Many computers have a repeat (rept) key that allows continuous repetition of a second key.)

Esc (Escape) key - used in duo with other keys on screen editing functions.

Arrow keys - move cursor in the direction of the arrow.

Letter keys - represent letters marked on each key plus a standard set of symbols.

Number keys - numbers 0 through 9. On some keyboards the 0 is indicated by a slash.

Apple introductory commands and their functions

Catalog - displays on the screen a list of all the programs that are available on a diskette.

Run - causes loading and execution of the program currently in memory of the program named.

Hello - name of the identification program on the disk.

Care and maintenance of the microcomputer.

Provide safe, adequate, storage space with a temperature range from 50 degrees F to 110 degrees F.

Protect from direct sunlight, moisture, or dust.

Use a static mat to control static electricity, because static electricity can stop programs.

Never pull a diskette out of the disk drive when the red light is on.

Provide protection from electrical surge; sometimes voltage regulators are installed to protect the microcomputer in case of electrical surge.

Consult the owner's manual for proper care and maintenance procedures pertaining to a specific model.

Care of floppy disk.

Never bend or fold a diskette.

Keep away from magnetic fields such as transformers, magnets, television sets, and radios. Magnetic fields will erase or alter the diskette's contents.

Do not place diskette on top of monitor or disk drives.

Never expose to X-ray equipment.

Store between 50 degrees F and 110 degrees F.

Store in protective jackets in a verticle position.

Never touch the surface of the diskette because skin oils will damage the disk.

Insert the diskette carefully into the disk drive.

Use only a felt tip pen to write on label of diskette jacket.

Make backup copies of all program software and store originals in a safe place.

Factors to consider before duplicating copyrighted software programs.

Many commercial programs take years of research and development as well as large amounts of capital to produce.

When commercial software is purchased, only the right to use the software is obtained.

An individual is permitted to make additional copies only for backup purposes.

Giving copies of commercial software to friends is illegal and discourages the development of new software.

Using a spread sheet.

Refer to INFO-5.

References:

Microcomputer Applications in Agriculture. Mid-America Vocational Curriculum Consortium, Inc. 1984.

Courtesy of MAVCC

Ways the Microcomputer is Used in Agribusiness

Provides Customer Services and Communications

Provides In-House Record Keeping

Agribusiness

Controls Equipment

Provides Inventory Information

Provides Financial Record Keeping

Perform Jobs Specific to the Business

Provides Tax and Accounting Services

Computer Use Survey

Name of Business:____

Nature of Business:___Agricultural, ___Nonagricultural

Business Use of Computers

	Yes	No
Customer services	____	____
Communications	____	____
Record keeping	____	____
Inventory control	____	____
Control of equipment	____	____
Financial record keeping	____	____
Tax records	____	____
Accounting services	____	____
Specific business jobs	____	____

Describe jobs:

COMPUTER TERMS AND DEFINITIONS

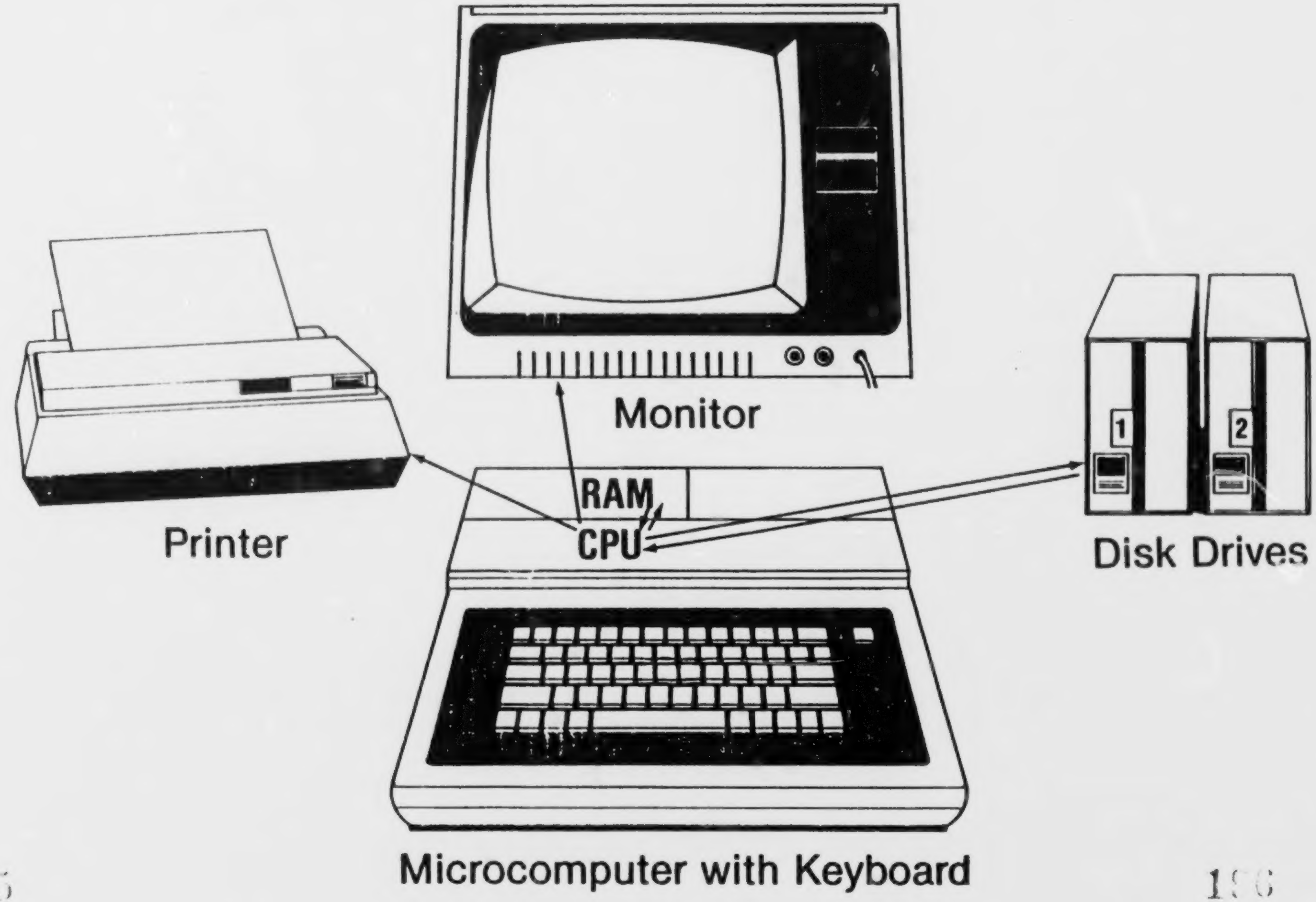
1. Arithmetic/logic unit - major component of the central processing unit which performs all arithmetic and logical operations under the direction of the control unit
2. Auxiliary storage device - (mass storage) supplementary means of storing data
3. Backup - to duplicate a file or separate piece of media in case the original is lost
4. BASIC - Beginer's All-purpose Symbolic Instruction Code; programming language developed at Dartmouth College, for use in academic computing but widely used on microcomputers
5. Batch processing - the accumalation and processing of data as a group
6. Bit - smallest unit of information that can be recognized by a computer
7. Boot the disk - process of adding the DOS commands to the Basic in Apple II
8. Byte - the unit of measure of a computer's memory; normally holds one characher (usually 8 bits)
9. Cassette tape cartridge - two reels of magnetic tape enclosed in a small plastic or metal cartridge that is used to store and retrieve data
10. Cathode ray tube(CRT) - vacuum tube with a screen and controlled beam of electrons that may be used either as a display or storage device or both (commonly called the monitor)
11. Central processing unit (CPU) - major component of a computer system responsible for processing all data handled by the system; consists of the control and arithmetic/logic unit.
12. Chips - miniature integrated circuits which have replaced transistors. (Integrated circuits are complete eletronic circuits which are assembled in a single process.)
13. Computer - An electronic device capable of receiving and storing data, performing prescribed operations on that data, and reporting the results of those operations.
14. Controller card (interface card) - small circuit board used to provide numerous functions depending on its purpose.
15. Cursor - character which indicates position on screen; is usually represented by a blinking square or underline.
16. Data - collection of numbers and/or words to be processed.
17. Data base - comprehensive data file containing information presented in a format which is applicable to user's needs; available when needed.
18. Disk operating system (DOS) - program responsible for keeping things in order and communications between the disk storage device and the computer.

COMPUTER TERMS AND DEFINITIONS

19. Documentation - illustrations and explanations that include both general information needed by the user of the program and the specfice information needed by the computer operator or the computer programmer if the program needs later updating.
20. Emulation - technique using softward or microprogramming in which one computer is made to behave exactly like another computer.
21. Floppy diskette - oxide coated reusable plastic disk enclosed in a protective covering (paper or plastic envelope) that is used to magnetically store and load information.
22. Hard copy - printed output from an information system
23. Hard disk - magnetized circular plate, which is inflexible and where data can be read onto and/or written from.
24. Hardware - physical parts of the computer.
25. Information processing - manipulation of factual matter of all kinds for the purpose of producing a desired answer or result
26. Input - means by which data from keyboards, tapes, hard disks, and floppy diskettes are enetered into an information processing system.
27. Interface - controller for input/output which can parallel (8 bits at a time) or serial (1 bit at a time).
28. K - symbol denoting 1,024 units (bytes) of information which indicates the size of the memory.
29. Memory - storage area of the computer which holds programs and data being processed.
30. Menu - list of choices or alternatives for user action; often a list of program options
31. Modem - device that converts data into impulses and transmits them over telephone lines from terminal to the computer and vice versa
32. Output - means by which information is reported from computer storage in a form that can be understood by human beings or in a form suitable for use as input for another computer system.
33. Printer - computer output device that produces printed copy.
34. Program - complete set of instructions that directs the computer and coordinates the operation of the various computer components.
35. Programming languages - languages used in writing programs to direct processing steps carried out by a computer.
36. Software - programming aids which assist the computer user in efficiently operating the equipment.

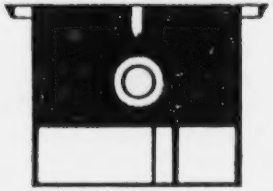
Courtesy of MAVCC

Flow of Computer Information

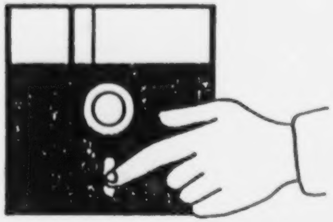

Monitor
Printer
RAM
CPU
1
2
Disk Drives
Microcomputer with Keyboard

Courtesy of MAVCC

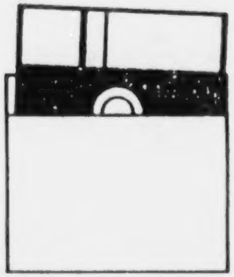
Handling a Floppy Diskette



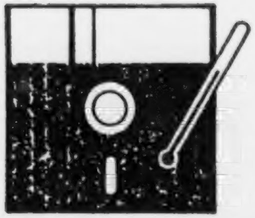
Insert carefully



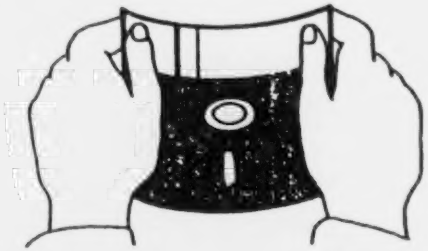
Never touch diskette



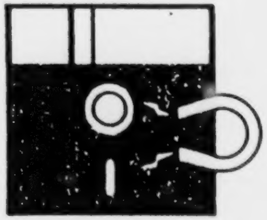
Protect in envelope



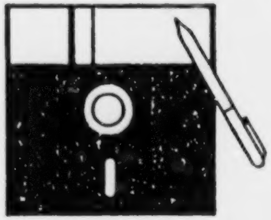
Maintain temperature of
50°F to 125°F



Do not bend or fold



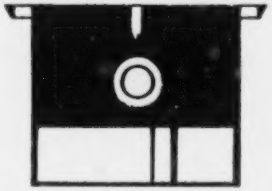
Never expose to magnetic field



Use only felt tip pen on jacket

Courtesy of MAVCC

Handling a Floppy Diskette



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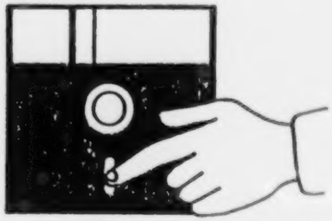

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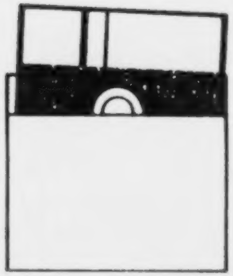

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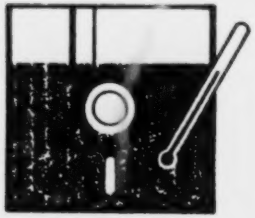

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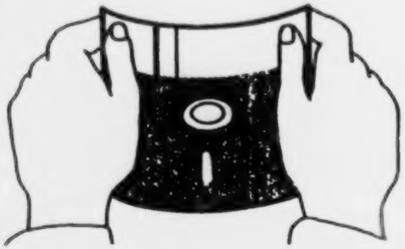

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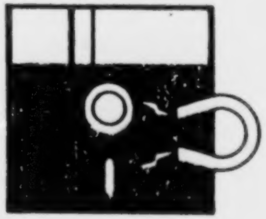

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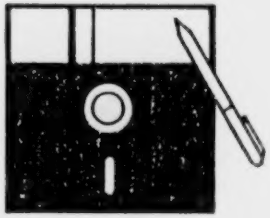

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Courtesy of MAVCC

Sources of Microcomputer Software (Agribusiness)

College of Agriculture Departments

Commercial Vendors

Computer User Groups

Agribusiness

Custom Software

Extension Service

Personal Programming

Time-Sharing Systems

Agricultural Magazines/Newsletters

RESOURCE LIST

Publications

(NOTE: The following is an alphabetical list of publications, which may be beneficial as supplemental teaching aids and reference materials and can be obtained by writing to the addresses below.)

Agricultural Computing Source Sheet
Doane Western, Inc.
8900 Manchester Road
St. Louis, MO 63144
(314) 968-1000
Monthly newsletter for computer users in agriculture.

Apple Orchard
908 George Street
Santa Clara, CA 95050
9 issues/year. Apple users only. News, software tips included.

Byte
70 Main Street
Peterborough, NH 03458
Monthly technical magazine. Detailed descriptions of hardware, construction articles, in-depth reviews.

Call A.P.P.L.E.
304 Main Street, Suite 300
Renton, WA 98055
7 issues/year. Apple users only. News, hardware tips, programs.

Compute!
P.O. Box 5406
Greensboro, NC 26403
Monthly. For Atari, Commodore, or Apple users only. Good tutorial approach, many programs, software tips.

Computers & Electronics
One Park Avenue
New York, NY 10016
Monthly. Many do-it-yourself hardware projects. Continuing coverage of audio, consumer electronics.

Creative Computing
39 E. Hanover Ave.
Morris Plains, NJ 07950
Monthly. For Apple, Atari, Radio Shack, IBM, and Commodore users. Evaluations and applications for home and school.

Creative Computing Buyer's Guides
39 E. Hanover Ave.
Morris Plains, NJ 07950
Two per year. Spring: Software Guide. Fall: Guide to Computers and Peripherals.

Educational Computer
P.O. Box 535
Cupertino, CA 95015
Bi-monthly. Success stories, how-to classroom applications, reviews.

Electronic Learning
902 Sylvan Avenue
Englewood Cliffs, NJ 07632
8 issues/year. Published by Scholastic. Lots of teacher contributions and reviews.

Instructional Innovator
1126 16th Street N.W.
Washington, D.C. 20036
Monthly. Covers audio visual, computers, and other related technology for schools.

Interface Age
16734 Marquardt Ave.
Cerritos, CA 90701
Monthly. Has moved toward primarily a business orientation. Good comparison charts of hardware and software.

Courtesy of MAVCC

RESOURCE LIST

International Bureau of
Software Testing
536 Wendell, Suite 7
Sunnyvale, CA 94086

Jarrett Agri Sales, Inc.
R.R. 1
La Pel, IN 46051
(317) 534-4937

McGraw-Hill Book Company
School Division
1221 Avenue of the Americas
New York, NY 10020
(800) 223-4180
(Profit and Loss)

Micro-Ag
R.R. 1
Princeton, IA 52766
(319) 289-4358
(Ag-Nalysis)

Micro Learningware
P.O. Box 2134
North Mankato, MN 56001
(507) 625-2205
(Farm Program, Computerized Farm Records)

Minnesota Educational Computing
Consortium (MECC)
2520 Broadway Drive
St. Paul, MN 55113
(612) 376-1118
(Agriculture, Vol. I)

Photocom Productions
P.O. Box 3135
Pismo Beach, CA 93449
(800) 321-7367

Professional Farm Software
219 Parkdale
Cedar Falls, IA 50613
(Crop Master)

Thayer, Ed
P.O. Box 271
Greenview, IL 62642
(217) 968-5825
(Swine Breeding Herds Record Program)

Vocational Agriculture Service
College of Agriculture
University of Illinois
1401 S. Maryland Drive
Urbana, IL 61801
(217) 333-3873

Wait Cattle Co.
133 Carolyn Lane
Nicholasville, KY 40356
(606) 887-1563
(Cattle Feeding, Cost, and Break-Even, Land Analysis)

Zeiller, John F.
305 Card Road
Hillsdale, MI 49242
(517) 283-2101
(Poultry Egg Production and Feed Conversion)

Courtesy of MAVCC

RESOURCE LIST

Media & Methods
1511 Walnut Street
Philadelphia, PA 19102
9 issues/year. Aimed at elementary/secondary schools; covers audio/video as well as computers.

Microcomputer Index
2464 El Camino Real #247
Santa Clara, CA 95051
Quarterly. One-line descriptions of all articles, reviews, and programs in 39 magazines.

MicroDiscovery
P.O. Box 7500
Bergenfield, NJ 07621
Monthly. For beginners. Articles, tutorials, news. Very low level and non-technical.

PC
39 East Hanover Avenue
Morris Plains, NJ 07950
Monthly. IBM personal computer and clones. Huge magazine with articles, reviews of peripherals and software.

PC World
555 DeHaro Street
San Francisco, CA 94107
Monthly. IBM personal computer only. Articles, stories, reviews about IBM PC and look-alikes.

Personal Computing
50 Essex Street
Rochelle Park, NJ 07662
Monthly. Business orientation with some items for home and education. Many articles and success stories. Some reviews.

Personal Software
Hayden Publishing Co., Inc.
50 Essex Street
Rochelle Park, NJ 07662
Monthly. News, reviews.

Popular Computing
70 Main Street
Peterborough, NH 03458
Monthly. Orientation to beginners. Nice graphic presentation. Novice-level tutorials.

School Microware Reviews
P.O. Box 246
Dresden, ME 04342
3 issues/year. Collection of software reviews for elementary/secondary level. Best of its kind. Publishes directory also.

Softalk
11021 Magnolia Blvd.
North Hollywood, CA 91601
Monthly. Apple only. Cram full of articles, stories, reviews, programs, tutorials, hints.

Softalk for IBM Personal Computer
11021 Magnolia Blvd.
North Hollywood, CA 91601
Monlthly. Programs, industry gossip, new product information.

Softside
6 South Street
Milford, NH 03055
Monthly. Program listings for TRS-80, Apple, and Atari. Somewhat inner directed with little outside advertising.

80 Micro
80 Pine Street
Peterborough, NH 03458
Monthly. TRS-80 only. The bible for Radio Shack owners. Programs, tutorials, hardware hints, stories.

RESOURCE LIST

80-U.S. Journal
3838 South Warner Street
Tacoma, WA 98409
Monthly. TRS-80 only. Technical information, programs, reviews.

99'er
P.O. Box 5537
Eugene, OR 97405
Monthly. Texas Instruments only. Hints, programs, news, reviews.

VisiCalc

The information below applies to the Apple IIe, IBM PC, and TRS-80 Model III. The following might be most often used in agricultural businesses.

1. Miscellaneous Facts

VisiCalc worksheet has 254 rows (1 to 254) and 63 columns (A to BK).
Standard column width is nine characters.
Rows and columns intersect to form cells.
A cell has a lable (June), value (250), or formula (4*84) placed in it.
Cursor is used to address a cell. By placing the cursor over the cell, you can enter, change, or delete information.
Upper left corner gives pertinent information.
To execute key: RETURN (Apple), ↵ (IBM), or ENTER (TRS-80).

2. Booting

Apple and IBM

Place VisiCalc disk in drive.
Turn computer on.
Wait until light on drive goes out.
Remove VisiCalc disk and return to cover.
Insert storage disk.
Key: / S L
Use right arrow key to bring up file to load.
Execute.

3. Cursor Movement

One space at a time	Arrows
Rapid movement	Hold arrow down
Long move	> (Give cell location)
Between windows	;

4. Labels

Start with any letter or "
To correct typeing errors:

Apple	ESC, DELETE, or CTRL-E
IBM	Backspace key ← , BREAK, or CTRL-E
TRS-80	CLEAR, SHIFT-ENTER

5. Values

If first character is: VALUE appears

-- digit 0, 1, 2, 3, etc.
-- decimal point
-- plus + or minus +
-- left parenthesis (
-- function indicator @
-- number sign #

6. Formulas

When starting an entry in a formula with a letter, the entry must be preceded by a +, -, (, or @.

7. Functions - Built in formulas.

Must identify two things:

$$\underbrace{\text{@ SUM}}_{\text{function}} \qquad \underbrace{\text{(B10. . .B14)}}_{\text{range}}$$

List functions:

@ SUM (list)	Sum of all values
@ MAX (list)	Identity of largest value
@ MIN (list)	Identity of smallest value
@ COUNT (list)	Number of non-blank entries
@ AVERAGE (list)	Value of mean

Key: @ SUM (Starting cell in range . ending cell in range)

Net Present Value - Calculates net present value of stream of future cash flows.

Key: @ NPV (dr, range)

Specify dr (the discount rate, or cost of money) as a decimal, and add the range of worksheet locations continuing the cash flows.

8. Commands

/ brings up major commands

9. /B Blank - to blank a cell.

10. /CY Clear - to clear an entire worksheet.

11. /D Delete - to delete an entire row or column.

/ D R for a row
/ D C for a column

12. /E Edit - allows existing labels or values to be changed

    Apple - to remove a character, use the arrow keys to move the edit cursor to the right of the character to be deleted. Press ESC and RETURN. The character to the left of the cursor disappears. To add, move the edit cursor to the right of the place a character is to be added. Press the key of the character to be added.

    IBM - (BKSP) deletes character to left of edit cue. Any character inserts character to left of edit cue. ↵ Arrow keys move edit cue without changing entries.

    TRS-80 - Left and right arrow keys move edit cue over characters without changing. Up arrow key moves edit cue to the beginning of the edit line; down arrow key moves edit cue to the end of the edit line. Enter or delete to the left of the edit cue. SHIFT-ENTER involves the Edit Command while entering values and labels. CLEAR edit cursor deletes one position.

13. /F Format - is for rounding numbers or moving labels to the right or left.

14. / F D to default to the last Global format

15. / F G to reset to standard VisiCalc

16. / F I to round values to whole numbers

17. / F L to left justify values

18. / F R to right justify labels

19. / F $ to round values to dollars and cents

20. / F * to replace values with asterisks

21. / G Global formatting

    Use to change:

    Column width
    Order of recalculation
    Manual vs. automatic recalculation
    Format of unformatted entries

22. / G C Column width. Establishes width of all columns in current window. Ranges from 3 to maximun screen width. Standard is 9.

23. / G O Order of calculation. Tells VisiCalc to calculate down columns (C) or across rows (R). The order is shown in upper right corner of screen. Standard format is C.

24. / G R Recalculation. Automatic Manual tells VisiCalc to do all calculations automatically (A), or to let you calculate manually (M) at will by pressing !.

25. / G F Format of Unformatted Cells. Sets format for all cells that have not been formatted individually. Uses the same subcommands (D, G, I, etc.) as the FORMAT command (F).

26. / G C to set special column width

27. / G O to change order of calculation

28. / G R to change between automatic and manual calculation

29. / G F to format unformatted cells

30. / I Insert Rows and Columns - shifts rows down or columns to the right.

    / I R or C

31. / M Move Rows and Columns

    Move cursor to location

        / M . destination

        If location is different than row where cursor is located, row is moved.

        If location is different than column where cursor is located, column is moved.

        To move a row down, or a column to the right, specify the coordinates of the first row or column after the destination.

        To move a row up or a column to the left, specify the precise coordinates of the destination.

        Example: With cursor in A3, to move row 3 to row 6, type current column (A) and number 7. With the cursor in A6, to move row 6 to row 3 type in the current column (A) and the number 3. With the cursor in row 3, to move column A to column C, you would type in D3. With the cursor in row 3, to move column C to column A, you would type A3. Always place the cursor on what is to be moved.

32. / P Print.

    1. Identify two cell locations.

        -- The cell in upper left corner of part of worksheet to be printed.
        -- The cell in the lower right corner of the worksheet you want to print.

    2. Give printing instructions.

        Place cursor in cell of upper left corner of sheet to be printed.
        / P P (unless printer in slot other than 6)
        Enter cell number in lower right.
        Execute.

33. / R Replicate. Can be used to copy or duplicate Values, Labels, Formulas, or Symbols from one cell or group fo cells to another cell or group of cells.

    Position Cursor.
    / R Source range . target range

34. / S Storage. For saving and retrieving work. When power is switched off, work is lost.

35. / SL to load file from disk to computer

36. / SS to save and update an existing file.

37. Initializing a disk

    All new disks must be initialized. Initialization only needs to be done once. Initializing a disk with data will erase the disk.

    Apple

    Place disk to be initialized in drive 1.
    / S I

    IBM

    Place IBM DOS 1.1 in Drive A
    Boot
    ↵
    ↵
    Place disk to be initialized in Drive B
    Type FORMAT B:15
    ↵
    Strike any key

    TRS-80

    Place VisiCalc disk in Drive 0
    When screen displays TRSDOS place disk to be initialized in Drive 1.

Type BACKUP
[ENTER]
0 when VisiCalc is in 0
[ENTER]
1 with disk to be initialized in drive 1.
[ENTER]
Type PASSWORD
[ENTER]
Return VisiCalc to protective cover

38. / T Titles

/ T H rows horizontal at or above cursor
/ T V columns verticle from cursor to left of screen
/ T B both
/ T N neither - resets to standard display

39. / W Window

/ W H splits horizontally
/ W V splits vertically
/ W 1 returns to one window
/ W S allows simultaneous movement of windows
/ W U cancels synchronized scrolling

40. / - Label repeat - allows character to repeat across the cell

/ - character RETURN

Credit:

These materials were prepared by Dr. Donald M. Claycomb, Executive Director of the Missouri Advisory Council on Vocational Education.

MICROCOMPUTER PROBLEM

This activity uses example information as listed. Assume a customer brings a soil test report calling for 90 pounds of nitrogen, 20 pounds of phosphorus, and 74 pounds of potassium to be applied to a 75 acre field. Assume that the fertilizer plant has the following fertilizer materials:

18-46-0
34-0-0
0-46-0
0-0-60

Use the following: nitrogen as 23.5 cents per pound, phosphorus at 20 cents per pound, potassium at 12 cents per pound, cart rent at $5.00 per ton, and truck application at $4.00 per acre.

"indicates a space

What information is needed to set up a fertilizer worksheet?

1. A soil test report.
2. A list of fertilizer materials available.
3. Costs of plant food and services

The following calculations may appear to be incorrect unless several decimal places are used. Although the computer prints whole numbers when instructed, it continues to use several decimal places when computing the calculations. Build a worksheet in the order as indicated in the following:

Setting up the worksheet and determining calculations needed.

1) Set up the sheet by first listing our information:

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	
Cart Rent 5.00 per ton				
Truck 4.00 per acre				

2) Next, determine the pounds of each respective product needed:

	Per Acre	Per Field
Pounds of 18-46-0 needed=	43	3261
Pounds of N supplied by 18-46-0= 8		
Pounds of N needed from 34-0-0= 82		
Pounds of 34-0-0 needed=	242	18127
Pounds of 0-0-60 needed=	123	9250
Total pounds of product=	408	30637

20 ÷ .46 = 43 x 75 = 3261
43 x .18 = 8
90 - 8 = 82
82 ÷ .34 = 242 x 75 = 18127
74 ÷ .6 = 123 x 75 = 9250
43 + 242 + 123 = 408
3261 + 18127 + 9250 = 30637

3) Determine analysis:

Analysis

%N	22.03185	90 ÷ 408 = 22.03
%P205	4.895966	20 ÷ 408 = 4.89
%K20	18.11507	74 ÷ 408 = 18.11

4) Determine the cost of plant food:

Costs of plant food	Per Acre	Field
N	21.15	1586.25
P205	4.00	300.00
K20	8.88	666.00
Cost of Plant Food	34.03	2552.25

90 x .235 = 21.15 x 75 = 1586.25
20 x .20 = 4.00 x 75 = 300.00
74 x .12 = 8.88 x 75 = 666.00
21.15 + 4.00 + 8.88 = 34.03
1586.25 + 300.00 + 666.00 = 2552.25

5) Determine the costs of our application alternatives:

Cart Rent	76.59
Truck	300.00

30637 ÷ 2000 x 5.00 = 76.59
75 x 4 = 300.00

6) Last, we determine the total cost of fertilizer and application using the two alternatives.

Total Cost With Cart	2628.84
Total Cost by Truck	2852.25

2552.25 + 76.59 = 2628.84
2552.25 + 300.00 = 2852.25

3. Prepare to use the microcomputer at this time.

Set up the VisiCalc template.

1. Boot the computer (#2 on INFO-9) Explain care of diskette.
2. Move the cursor (#3 on INFO-9).
3. Enter

Customer: Joe Crop (TM-11)
Field ID: North

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	

Cart Rent 5.00 per ton
Truck 4.00 per acre

A1: Customer:
B1: Joe Crop
A2: Field ID:
B2: North
A4: Plant foo
C4: 90
D4: 20
E4: 74
G4: 75
A5: Price Per
B5: ""Pound
C5: .235
D5: .2
B4: d needed
C3: N
D3: P205
E3: K20
G3: No. Acres
E5: .12
A6: Cart rent
B6: 5
C6: Per Ton
A7: Truck
B7: 4
C7: Per Acre

4) The appearance is not desirable. ~~Let's~~ Clean it up. Place the cursor on:
C3: /FR (#18 HO)
D3: /FR (#18 HO)
E3: /FR (#18 HO)
B6: /F$ (#19 HO)
B7: /F$ (#19 HO)
Place a space between "5.00" and "Per Ton"
C6: ""Per Ton (#4 HO)
C7: ""Per Acre (#4 HO)

5) Enter: (TM-12)
EASY SPRINGS FERTILIZER
Move the cursor to the top row. Key:
/ I R (#30 HO)
/ I R
There are now two spaces at the top.

Find the center. How many columns are we using? Seven. Therefore, D is the center. "EASY SPRINGS FERTILIZER" uses 23 spaces. The middle 9 are found as follows 23 - 9 = 14 ÷ 2 = 7. Count in 7 spaces and we have RINGS FER. Key this into D1. TILIZER into E1. "==EASY SP" goes into C1.

6) Next, build the following: (TM-13)

	Per Acre	Per Field
Pounds of 18-46-0 needed =	43	3261
Pounds of N supplied by 18-46-0 = 8		
Pounds of N needed from 34-0-0 = 82		
Pounds of 34-0-0 needed =	242	18127
Pounds of 0-0-6- needed =	123	9250
Total pounds of product =	408	30637

```
A12:  Pounds of
B12:  "=18-46-0 (#4 HO)
C12:  needed=
F11:  Per Acre
G11:  Per Field
F12:  +D6/.46 (#6 HO)
G12:  +G6*F12 (#6 HO)
A13:  Pounds of
B13:  "=N suppli (#4 HO)
C13:  ed by 18-
D13:  "46-0 = (#4 HO)
E13:  +F12*.18
A14:  Pounds of
B14:  "=N needed (#4 HO)
C14:  "=from 34- (#4 HO)
D14:  "0-0 = (#4 HO)
E14:  +C6-E13 (#6 HO)
A15:  Pounds of
B15:  "=34-0-0 n (#4 HO)
C15:  eeded =
F15:  +E14/.34 (#6 HO)
G15:  +F15*G6 (#6 HO)
A16:  Pounds of
B16:  "=0-0-60 n (#6 HO)
C16:  eeded =
F16:  +E6/.6 (#6 HO)
G16:  +F16*G6 (#6 HO)
A17:  Total Pou
B17:  nds of pr
C17:  oduct=
F17:  +F12+F15+F16 (#6 HO)
```

Convert each of the values to a whole number.
/F I (#16 HO)

7) Build the analysis (TM-14)

Analysis

%N	22.03185
%P205	4.895966
%K20	18.11507

```
A18:  Analysis
A19:  "===%N (#4 HO)
B19:  +C6/F17*100 (#6 HO)
A20:  "===%P205 (#4 HO)
B20:  +D6/F17*100 (#6 HO)
A21:  "===%K (#4 HO)
B21:  +E6/F17*100 (#6 HO)
```

8) Now calculate the costs of plant food.

Costs of plant food	Per Acre	Field
N	21.15	1586.25
P205	4.00	300.00
K20	8.88	666.00
Cost of Plant Food	34.03	2552.25

A23: Costs of
B23: plant foo
C23: d
D23: Per acre
E23: Field
F23: /FR (#18 HO)
B24: N
D24: +C6*C7 (#6 HO)
E24: +D24*G6 (#6 HO)
B25: P205
D25: +D6*D7 (#6 HO)
E25: +G6*D25 (#6 HO)

At this time, we may be losing sight of our labels. Place the cursor on row 1, then on row 10 and key:
/WH (#39 HO)
To move the cursor from window to window, key:
(#3 HO)

Now one is window stationary and the window with the cursor can be moved.

B26: K
D26: +E6*E7 (#6 HO)
E26: +G6*D26 (#6 HO)
D27: "---------- (#4 HO)
E27: "---------- (#4 HO)

B28: Cost of P
C28: lant Food
D28: @ SUM (D24 . . . D26) (#7 HO)
E28: +G6*D28

Convert numbers to dollars.
/ F $ (#20 HO)

9) Calculate application costs (TM-15)

Cart Rent	76.59
Truck	300.00

E30: /F$+G17/2000*B8 (#19 HO)
E31: /F$+B9*G6 (#19 HO)

10) Calculate total costs (TM-16)

Total Cost With Cart	2628.84
Total Cost By Truck	2852.25

A33: Total Cos
B33: t With Ca
C33: rt
E33: /F$+E23+E30 (#19 HO)
A34: Total Cos
B34: t By Truc
C34: k
E34: /F$+E28+E31 (#19 HO)

11) Add the final line to the bottom. (TM-17)
YOUR BUSINESS IS APPRECIATED!
Thirty spaces are used. 30 - 9 = 21 ÷ 2 = 10. Count ten back from E.

12) Return the window to 1 if it is not already.
/ W 1 (#39 HO)

```
>F36:" !
>E36:"PRECIATED
>D36:"ESS IS AP
>C36:"OUR BUSIN
>B36:"          Y
>E34:/F$+E28+E31
>C34:"k
>B34:"t By Truc
>A34:"Total Cos
>E33:/F$+E28+E30
>C33:"rt
>B33:"t With Ca
>A33:"Total Cos
>E31:/F$+G6*B9
>B31:/F$
>A31:"Truck
>E30:/F$+G17/2000*B8
>B30:/F$
>A30:"Cart Rent
>E28:/F$+G6*D28
>D28:/F$@SUM(D24...D26
>C28:"lant Food
>B28:/FR Cost of P
>E27:"   -------
>D27:"    ------
>E26:/F$+G6*D26
>D26:/F$+E6*E7
>B26:"K
>E25:/F$+G6*D25
>D25:/F$+D6*D7
>B25:"P205
>E24:/F$+G6*D24
>D24:/F$+C6*C7
>B24:"N
>E23:/FR"Field
>D23:/FR"Per Acre
>C23:"d
>B23:"plant foo
>A23:"Costs of
>B21:+E6/F17*100
>A21:"    %K20
>B20:+D6/F17*100
>A20:"    %P205
>B19:+C6/F17*100
>A19:"    %N
>A18:"Analysis
>G17:/FI+G6*F17
>F17:/FI+F12+F15+F16
>C17:"oduct=
>B17:"nds of pr
>A17:"Total pou
>G16:/FI+G6*F16
>F16:/FI+E6/.6
>C16:"eeded=
>B16:" 0-0-60 n
>A16:"Pounds of
```

```
>G15:/FI+G6*F15
>F15:/FI+E14/.34
>C15:"eeded=
>B15:" 34-0-0 n
>A15:"Pounds of
>E14:/FI+C6-E13
>D14:"0-0=
>C14:" from 34-"0
>B14:" N needed
>A14:"Pounds of
>E13:/FI+F12*.18
>D13:"46-0=
>C13:"ed by 18-
>B13:" N suppli
>A13:"Pounds of
>G12:/FI+G6*F12
>F12:/FI+D6/.46
>C12:"needed=
>B12:" 18-46-0 n
>A12:"Pounds of
>G11:"Per Field
>F11:"Per Acre
>H10:/FR
>C9:" Per Acre
>B9:/F$4
>A9:"Truck
>C8:" Per Ton
>B8:/F$5
>A8:"Cart Rent
>E7:.12
>D7:.2
>C7:.235
>B7:" pound
>A7:"Price per
>G6:75
>E6:74
>D6:20
>C6:90
>B6:"d needed
>A6:"Plant foo
>G5:"No. Acres
>E5:/FR"K20
>D5:/FR"P205
>C5:/FR"N
>B4:"North
>A4:"Field ID:
>B3:"Joe Crop
>A3:"Customer:
>E1:"TILIZER
>D1:"RINGS FER
>C1:"  EASY SP
/W1
/GOC
/GRA
/GC9
/X>A1:>A1:
```

FINISHED WORKSHEET

```
                      EASY SPRINGS FERTILIZER

Customer:Joe Crop
Field ID:North
                                N      P205       K20          No. Acres
Plant food needed              90        20        74                 75
Price per pound              .235        .2       .12
Cart Rent       5.00 Per Ton
Truck           4.00 Per Acre

                                                      Per Acre Per Field
Pounds of 18-46-0 needed=                                   43      3261
Pounds of N supplied by 18-46-0=                  8
Pounds of N needed from 34-0-0=                  82
Pounds of 34-0-0 needed=                                   242     18127
Pounds of 0-0-60 needed=                                   123      9250
Total pounds of product=                                   408     30637
Analysis
   %N     22.03185
   %P205  4.895966
   %K20   18.11507

Costs of plant food           Per Acre     Field
         N                       21.15   1586.25
         P205                     4.00    300.00
         K20                      8.88    666.00
                                ------   -------
         Cost of Plant Food      34.03   2552.25

Cart Rent                                  76.59
Truck                                     300.00

Total Cost With Cart                     2628.84
Total Cost By Truck                      2852.25

                  YOUR BUSINESS IS APPRECIATED
```

Sample Worksheet 1

Customer: Joe Crop
Field ID: North

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	
Cart Rent	5.00 Per Ton			
Truck	4.00 Per Acre			

Sample Worksheet 2

EASY SPRINGS FERTILIZER

Customer: Joe Crop
Field ID: North

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	

Cart Rent 5.00 Per Ton
Truck 4.00 Per Acre

Sample Worksheet 3

EASY SPRINGS FERTILIZER

Customer: Joe Crop
Field ID: North

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	

Cart Rent	5.00 Per Ton
Truck	4.00 Per Acre

			Per Acre	Per Field
Pounds of 18-46-0 needed	=		43	3261
Pounds of N supplied by 18-46-0	=	8		
Pounds of N needed from 34-0-0	=	82		
Pounds of 34-0-0 needed	=		242	18127
Pounds of 0-0-60 needed	=		123	9250
Total pounds of product	=		408	30637

Sample Worksheet 4

EASY SPRINGS FERTILIZER

Customer: Joe Crop
Field ID: North

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	

Cart Rent 5.00 Per Ton
Truck 4.00 Per Acre

		Per Acre	Per Field
Pounds of 18-46-0 needed	=	43	3261
Pounds of N supplied by 18-46-0	= 8		
Pounds of N needed from 34-0-0	=82		
Pounds of 34-0-0 needed	=	242	18127
Pounds of 0-0-60 needed	=	123	9250
Total pounds of product	=	408	30637

Analysis

%N	22.03185
%P205	4.895966
%K20	18.11507

Sample Worksheet 5

EASY SPRINGS FERTILIZER

Customer: Joe Crop
Field ID: North

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	

Cart Rent	5.00 Per Ton
Truck	4.00 Per Acre

			Per Acre	Per Field
Pounds of 18-46-0 needed	=		43	3261
Pounds of N supplied by 18-46-0	=	8		
Pounds of N needed from 34-0-0	=	82		
Pounds of 34-0-0 needed	=		242	18127
Pounds of 0-0-60 needed	=		123	9250
Total pounds of product	=		408	30637

Analysis

%N	22.03185
%P205	4.895966
%K20	18.11507

Costs of plant food	Per Acre	Field
N	21.15	1586.25
P205	4.00	300.00
K20	8.88	666.00
Cost of Plant Food	34.03	2552.25

Sample Worksheet 7

EASY SPRINGS FERTILIZER

Customer:	Joe Crop
Field ID:	North

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	

Cart Rent	5.00 Per Ton
Truck	4.00 Per Acre

			Per Acre	Per Field
Pounds of 18-46-0 needed	=		43	3261
Pounds of N supplied by 18-46-0	=	8		
Pounds of N needed from 34-0-0	=	82		
Pounds of 34-0-0 needed	=		242	18127
Pounds of 0-0-60 needed	=		123	9250
Total pounds of product	=		408	30637

Analysis

%N	22.03185
%P205	4.895966
%K20	18.11507

Costs of plant food	Per Acre	Field
N	21.15	1586.25
P205	4.00	300.00
K20	8.88	666.00
Cost of Plant Food	34.03	2552.25
Cart Rent		76.59
Truck		300.00
Total Cost With Cart		2628.84
Total Cost By Truck		2852.25

Sample Worksheet 8

EASY SPRINGS FERTILIZER

Customer: Joe Crop
Field ID: North

	N	P205	K20	No. Acres
Plant food needed	90	20	74	75
Price per pound	.235	.2	.12	

Cart Rent 5.00 Per Ton
Truck 4.00 Per Acre

			Per Acre	Per Field
Pounds of 18-46-0 needed	=		43	3261
Pounds of N supplied by 18-46-0	=	8		
Pounds of N needed from 34-0-0	=	82		
Pounds of 34-0-0 needed	=		242	18127
Pounds of 0-0-60 needed	=		123	9250
Total pounds of product	=		408	30637

Analysis

%N	22.03185
%P205	4.895966
%K20	18.11507

Costs of plant food	Per Acre	Field
N	21.15	1586.25
P205	4.00	300.00
K20	8.88	666.00
Cost of Plant Food	34.03	2552.25
Cart Rent		76.59
Truck		300.00
Total Cost With Cart		2628.84
Total Cost By Truck		2852.25

Your Business Is Appreciated!

Horticulture Sales and Service

PROBLEM AREA 1

WHAT SKILLS DO MANAGERS NEED TO SUPERVISE WORK AND SALES OPERATIONS AND REGULATE EMPLOYEES?

Contents

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PROBLEM 1: What skills do managers need to supervise work and sales operations and regulate employees.

INTEREST APPROACH:

Joe is working in the Country Garden Center. It is a large business that employees 45 workers. Joe is working as supervisor of sales. He is a very competent sales person and is supervising 12 sales people. The manager of the business asked to visit with Joe about two problems the business is experiencing. The first problem is related to business sales. They have decreased by 25 percent since Joe was employed as sales supervisor. The second problem is related to employee complaints about his supervision and direction of their work. They feel he does not explain to them what he wants them to do. Joe's manager indicates that he feels that Joe is the cause of both problems. Joe makes the statement to his manager that it is better to do the work himself because he can't get the quality of work out of his subordinates that he would like. How should the manager handle this situation and what should he recommend to Joe?

STUDY QUESTIONS:

1. What are the main management areas in a horticultural business?

2. Why is planning important in managing a horticultural business?

3. Why is goal setting vital to a business?

4. What are the characteristics which a manager looks for when hiring a horticultural employee?

5. Why is training of employees so vital in a successful business?

6. How should managers deal with conflicts with customers?

7. How should managers deal with conflicts within the business and among employees?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

1. To think and respond to people and their actions. Student Learning Activity #2.

2. To develop long- and short-term planning strategies. Student Learning Activity #5.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

1. Improve the students' ability to communicate with customers and employees in different situations. Student Learning Activity #9.

2. Improve the students' ability in delegating and evaluating employees' work. Student Learning Activity #7.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

1. Selecting the appropriate business communication for the situation and goal. Student Learning Activity #6.

2. Formulating long-term plans, short-term plans, and overall business management of the entire business. Student Learning Activity #4.

STUDENT LEARNING ACTIVITIES:

1. Have an industry person speak to the class on the different parts of a horticultural business. A variation of this activity would be to have the students interview a manager in business dealing with the areas of the business for which the manager is responsible.

2. Have students brainstorm the different horticultural areas and businesses and the different parts of each of the businesses. Divide students into small groups and assign each group a horticultural business in the community. Have students visit that business and interview the manager and employees to determine the different areas of the business and the functions of the business. Have students summarize their findings on ACT-1. Compare group work in class.

3. Introduce the difference between long-term and short-term strategy or planning involved with setting up or managing a business (TM-2). Students can be given ACT-3 to identify the difference between long and short term plans.

4. Identify the advantages to goal setting and the seven steps to reaching goals (TM-4). Have students complete ACT-5.

5. Pose to the class a situation from INFO-6. In small groups of three and four students, have students:

    a. Identify the problem.

    b. Why did it happen?

    c. Solutions for solving the problem (more than one).

    d. What to do about it?

    e. Best solution and ways to implement.

    f. How to correct it?

Following, the teacher should review the groups' solutions and emphasize why the problem/situation occurred and discuss their analysis of the problem/situation.

6. Invite an employer to class and have him/her describe the qualities which he/she looks for in a sales employee. Using ACT-7, have the students list the qualities shared by the employer. Have each student rate the importance of each quality and explain why each quality is important and how to develop it.

7. Using ACT-8, have each student interview five people who do business at a local florist shop, garden center, or nursery about what they like and dislike in a sales person. Have them list the likes and dislikes and rate them. When they have finished with their interviews, have them summarize their observations and share them with the class.

8. Review and discuss TM-9 and 10 and INFO-11. Divide the students into two groups. Give one group written directions, the task of writing down all the factors which may cause conflicts between employers and employees. The other group should be given written directions to identify all factors which may cause conflict between students and teachers. As a class, compare the two lists. They should be similiar in nature. Relate to the students how conflicts affect job success. Use ACT-12 to have students self-evaluate themselves.

9. Obtain the materials that would be needed to set up a display typical of that in a horticultural business. Select five students to come to the front of the class. Give each a character in which to play while they design the display for the business. Students should identify the roles which the students are playing and how the manager should use constructive criticism to have employees work at their optimumn levels using ACT-13.

10. Ask students to describe some of their experiences when they have been upset or treated unfairly before, during, or after they have purchased an item or service

in a store or business. The students should then list ways in which employees of a business can treat their customers better and how managers should handle customer complaints.

CONCLUSION:

There are four main areas of consideration which the manager needs to be aware of:

Careful planning

Proper selection of personnel

Adequate training of employees

Proper work incentives

Careful planning needs to focus on two specific areas:

Long-term planning: Deals with the planning of the business for 5-10 years. Includes decisions regarding capital purchases and adoption of new business strategies.

Short-term planning: Deals with business goals set for the year. Directs operation for month to month and daily procedures.

Goal setting is vital to business to evaluate progress.

Goals allow you to set a plan to follow. They:

Provide direction and motivation.

Provide a time strategy to aid in organization and decision making.

Steps to reaching goals include:

Prioritizing goals which will provide the largest payoff.

Developing a plan of action.

Visualizing the result.

Creating a positive attitude.

Telling all employees about the business' goals and instill in them so they are their goals too.

Providing group reinforcement and feedback.

Cermonizing the result, providing work incentives.

Things to look for when hiring employees:

Productivity

Care of equipment

Loyalty

Ambition

Good attitude

Co-operation

Honesty

Compliance with rules

Training employees is vital to a successful business.

Make time to train new people.

Be systematic and open in teaching and with business communications.

Train employees the way in which you wish them to handle customer complaints.

Proper handling of customer complaints is important to the management of a horticultural business.

Horticultural businesses deal with four types of customers. They are:

Prospective buyers: These people hae no definite purchase in mind.

Buyers: These people have a definite idea of what they want to buy.

Casual visitors: These people have no purchase n mind. They are just looking to see what the business has to offer.

Customers with complaints: These people have a gripe about a purchase that they want to business to make right.

Managers and employees should handle objections in the following manner:

Get a clear understanding of the objection.

Have the objection restated if it is not clear.

Do not interrupt before the customer is finished.

Do not flatly say the customer is wrong.

Point out that the customer has an interesting viewpoint, however, the business looks at it another way.

Agree that you have heard of the objection before.

Restate the customer's objection in your own words in a less negative way. This helps to see if the objection is really understood.

Change the customer's objection into a question, if possible.

Answer the question or solve the problem, if possible.

Remember, the customer usually wants to let off steam. Once this is done, the problem is usually easily solved so that both parties are satisfied.

When dealing with conflicts among employees, managers should:

Lead parties in conflict to be tolerant of each other.

Point out that no one is perfect.

Be sure both parties want to understand each other's views.

Point out the good in each party.

Lead parties to dislike the action, not the person.

Obtain all facts associated with the problem.

Be sympathetic toward both parties.

Maintain a neutral position while all facts are learned.

Weigh the facts in light of business goals and operating policies.

Rule on situation based on the facts in such a manner that both parties are content with the decision and feel that the conflict is resolved.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify and describe the four main areas of supervising a horticultural business.

Define long-term and short-term planning.

Discuss why goal setting is vital to a business.

List the steps in designing an advertising campaign for a horticultural business.

List desirable personal characteristics of possible employees in the horticultural industry.

Describe why training is important to the successful horticultural business.

Describe how to resolve customer conflicts.

List steps to follow in resolving employee conflicts.

REFERENCES:

The Retail Business, Pfahl, Peter B. The Interstate Printers and Publishers, Inc., Danville, IL (1977).

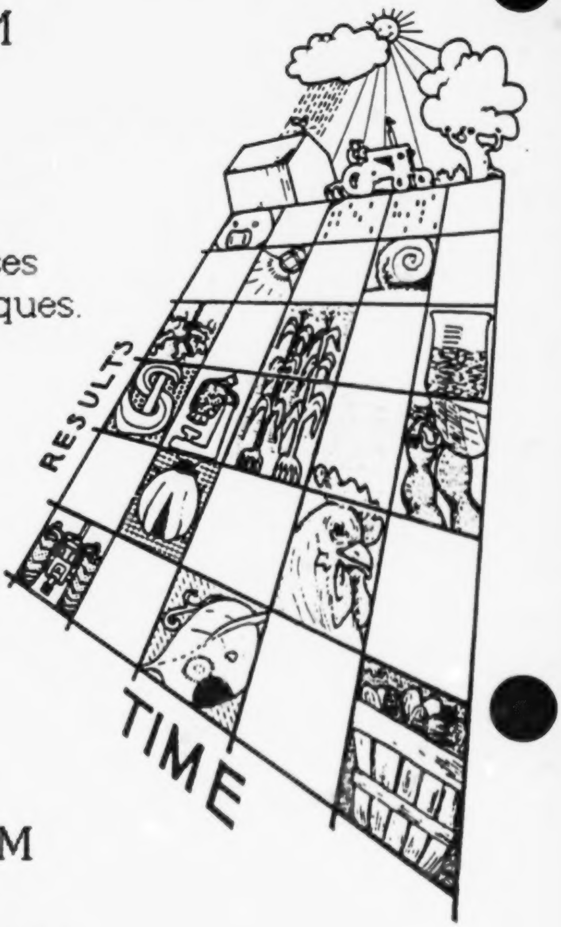
SURVEY OF HORTICULTURAL BUSINESS

Name of business: ______________________________

Area of Business	Function of Business Area

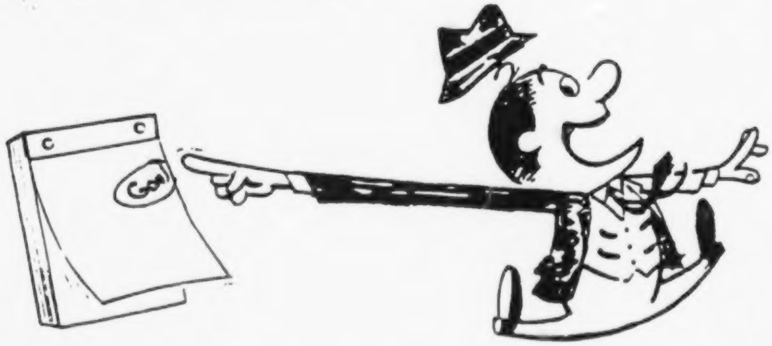
LONG-TERM

- Deals with planning for the future.
- 5 to 10 years or more.
- Includes decisions on capital purchases and adoption of new business techniques.



SHORT-TERM

- Deals with business goals set for the year
- Directs monthly and daily business operations.
- Work to accomplish long term planning



CLASSIFICATION OF PLANNING ACTIVITIES IN HORTICULTURAL BUSINESSES

Classify the following activities as to whether they are "long-term" activities or "short-term" activities:

Greenhouse Management

Renovate the small greenhouse.

Add more greenhouse space.

Establish profit goals.

Set up an advertisement for next week's paper.

Replace glass panes.

Purchase new automatic watering system.

Set up planting schedule for the year.

Long-term Activities

____

____

____

____

Short-term Activities

____

____

____

____

Classify the following activities as to whether they are "long-term" activities or "short-term" activities:

Nursery and Landscape

Plant Christmas tree seedlings.

Make business projections of income and expenses.

Order supplies.

Determine community plant material needs.

Purchase a new tree planting machine.

Send out monthly bills.

Long-term Activities

Short-term Activities

Classify the following activities as to whether they are "long-term" activities or "short-term" activities:

Florists

Complete wedding flower order.

Order roses for next month.

Purchase new refrigerator.

Deliver daily orders.

Determine space needed for business expansion.

Add a new line of gifts and flower assessories.

Long-term Activities

____

____

____

____

____

Short-term Activities

____

____

____

____

____

Classify the following activities as to whether they are "long-term" activities or "short-term" activities:

Garden Center

Develop an advertising campaign.

Establish a computerized business accounting system.

Set up an inventory control program.

Determine employee needs.

Make business income and expense projections.

Determine business credit needs.

Determine kinds and amounts of stock and equipment to buy.

Long-term Activities

____

____

____

____

____

Short-term Activities

____

____

____

____

STEPS TO REACHING GOALS

CEREMONIZE THE RESULT

PROVIDE REINFORCEMENT

TELL EVERYONE OF THE GOAL

CREATE A POSITIVE ATTITUDE

VISUALIZE THE RESULTS

DEVELOP A PLAN OF ACTION

PRIORITIZE GOALS

ESTABLISHING HORTICULTURAL BUSINESS GOALS

Country Garden Center

In the left hand column, list five goals for the Country Garden Center. In the right hand column, select one of these goals and develop a plan for reaching that goal using the same steps described in class.

GOALS	STEPS TO REACHING GOALS
______________________________	______________________________
______________________________	______________________________
______________________________	______________________________
______________________________	______________________________
______________________________	______________________________
	______________________________
	______________________________
	______________________________
	______________________________

EFFECTS OF GOOD AND POOR PLANNING

The situations posed below are to be separated. Each group of three to four students will receive one situation and be asked to:

Identify the problem - why did the problem occur?

Possible solution to solve the problem - what to do about the problem or situation?

Best solution and way to implement - how do you correct the problem?

Situation 1:

It's two days before Valentine's Day and there are orders which cannot be filled because you have run out of roses.

Why did this happen?

What do you do about the problem or situation?

Select the best option and explain how to implement the solution.

Situation 2:

It's the week before Mother's Day and the employee you hired three weeks ago did not show up for work for the past two days. Since he began working he has been late a few times and seems withdrawn from the other employees. Other emloyees do not talk to him. The designer's previous work experience indicated that he would stay only short times at one place.

Why did this happen?

What do you do about the problem or situation?

Select the best option and explain how to implement the solution.

ACTIVITY SHEET

TRAITS OF A SUCCESSFUL SALESPERSON:

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

ACTIVITY SHEET

CUSTOMER LIKES AND DISLIKES:

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

________________________________ 1 2 3 4 5

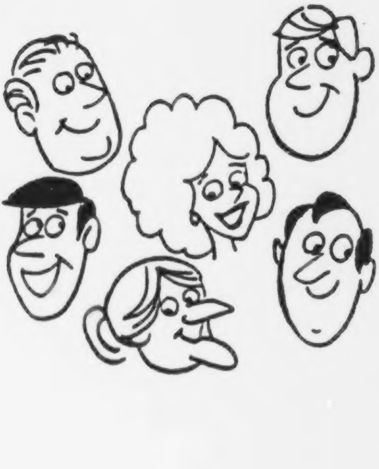
________________________________ 1 2 3 4 5

TYPES OF CUSTOMERS

Prospective Buyers

Buyers

Casual Visitors



Customers with Complaints

When Handling Customer Complaints

* Get a clear understanding of the objection

* Do not say the customer is wrong

* Agree to hearing the objection before

* Restate customer's objection in a positive way

* Change objection to a question

* Answer or solve the problem

* Remember, the customer usually wants to let off steam

EMPLOYEE CONFLICT

When dealing with employee conflicts:

Lead parties to tolerate each other.

Point out that no one is perfect.

Be sure both parties want to resolve the conflict.

Point out the good in each party.

Lead parties to dislike the action, not the person.

Obtain all facts about the problem.

Be sympathetic toward both parties.

Maintain a neutral position until all facts are known.

Weigh the facts in light of business goals and operating policies.

Rule on the situation based on the facts in such a manner that both parties are content with the decision and feel that the conflict is resolved.

Name________________________________ Date________________________________

HOW DO I RATE[1]

It is easy to evaluate and criticize others. The real test is when we take a look at ourselves. Do you see yourself as others see you?

__Instructions__: Answer the questions below as truthful as possible. Answer in the first blank only; use "Y" for yes, "N" for now, and "S" for seldom.

		Your Rating	Rating by Fellow Students	
1.	I compliment those who do good work.			
2.	I go out of my way to be helpful.			
3.	I seldom criticize the mistakes of others.			
4.	I am careful not to embarrass others.			
5.	I listen attentively to people and encourage them to tell me their needs.			
6.	I am careful not to interrupt people abruptly to make a remark I think is important.			
7.	I avoid petty arguments.			
8.	I am careful not to introduce my opinions and notions when I have not been asked for them.			
9.	I say thank you for small favors.			
10.	I say excuse me or pardon me when walking in front of people.			
11.	I hold a handkerchief to my face when I sneeze.			
12.	I am careful not be become hostile and sarcastic.			
13.	I am calm and patient under trying conditions.			
14.	I talk in a friendly, quiet tone of voice.			
15.	I am careful not to make gestures or grimaces.			
16.	My voice and manner tell all that is necessary.			
17.	I am tolerant of other people's ideas and customs.			
18.	I control my desire to make wisecracks.			
19.	I am careful not to gossip.			
20.	I am careful not to make fun of anyone.			

---

[1] __Course of Study in Agricultural Occupations__, University of Kentucky, Lexington, Kentucky.

WORKING WITH OTHERS

Student learning activity roles:

1. Person who wants to leave it the same.
2. Person who only wants to do their way.
3. Person who really doesn't care.
4. Person who has to have every detail planned.
5. Person who tries to get everyone to come to a consensus or get them to agree (manager).

Through this activity you are responsible for playing the assigned role. Your task is to arrange a new display area in the business. You are to assist in setting up the display portraying the role assigned to you.

PROBLEM AREA 2

WHAT QUALIFICATIONS DO HORTICULTURAL WORKERS NEED TO BE SUCCESSFUL EMPLOYEES AND HOW DO THEY SECURE EMPLOYMENT?

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PROBLEM 2: What qualifications do horticultural workers need to be successful employees and how do they secure employment?

INTEREST APPROACH:

Announce to your class that Mr. or Mrs. ________________, a local horticultural business owner is coming to class to interview students for a possible position in his/her business. Describe the position that the employer is seeking to fill. Ask how many students are interested in the position. Have Mr. or Mrs. ____________ conduct the interviews among members of the class. After the interview is over, have the employer discuss each interview pointing out the strengths and weaknesses of the interview.

STUDY QUESTIONS:

1. What are the occupations available to people interested in working in horticultural businesses?
2. What specific technical tasks do workers in horticultural businesses perform in their jobs?
3. What business tasks do workers in horticultural businesses perform in their jobs?
4. What personal characteristics must workers in different horticultural occupations possess to be effective employees?
5. How does one prepare to enter an occupation in the horticulture industry?
6. What is a resume and what should be included in it?
7. How do you sell yourself to an employer?
8. What is expected of a person when interviewing for a job in the horticultural industry?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Interaction with age-mates. Student Learning Activity #5.

Establish educational and career goals. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Strengthen students' ability to follow written directions. Student Learning Activity #4.

Write clear, concise, and courteous business letters. Student Learning Activity #6.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguish between verifiable facts and value claims. Interest Approach.

Identify unstated and stated assumptions. Student Learning Activity #5.

STUDENT LEARNING ACTIVITIES:

1. Divide the class into groups of two or three students. Assign to each group a horticultural business in the community. Have each group visit with the manager of the business asking him to describe the various occupations of workers and whether these workers are full or part time workers. Have students develop a list of full- and part-time occupations in that business. Compile the lists of each group and compare it with TM-1.

2. Using INFO-2, have students select an occupation in a business in the horticultural industry and develop three lists of tasks performed by workers in that occupation. The lists should be entitled "Technical Tasks," "Personal Characteristics," and "Business Tasks." Based on the information presented in INFO-2, have each student write a job description for that occupation.

3. Invite a representative from an area school horticulture program to class to discuss with students how to prepare for an occupation in the horticulture industry. Based on the speaker's comments and the references cited, have students lay out a plan for preparing to enter the occupation studied in Activity #2.

4. Review and discuss INFO-3 and 5 and TM-4. Have each student write a resume for the occupations students studied in ACT-2 that could be used to submit to a possible employer.

5. Have students read INFO-6, 7, 8, and 9, 10, and 11, and view in class TM-12, 13, 14, and 15. Divide class into groups of two. Assign one the employer role and one the role of a job applicant. Role play a job interview using questions provided in INFO-11. When the interview is finished, reverse the roles played by the students and conduct another interview. Have students use the same occupations and resumes they developed for Student Learning Activity #2.

6. Have students glean the newspaper for job opportunities and select one they would like to apply for. Have each student write a letter of application for the job.

CONCLUSION:

The answers to the study questions are provided in the supplemental materials.

EVALUATION:

Upon completion of this lesson, students will be able to:

List occupations in various segments of the horticultural business.

Describe the technical, business, and personal tasks performed by workers in horticultural businesses.

Describe how to prepare to enter a horticultural occupation.

Write a resume.

Sell themselves to an employer.

Participate effectively in a job interview.

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Landscape Maintenance and Establishment. Instructional student manual. Department of Agricultural Education, The Pennsylvania State University, University Park, Pennsylvania.

Nursery Production. Instructional student manual, Department of Agricultural Education, The Pennsylvania State University, University Park, Pennsylvania.

The Garden Center Worker. Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

Full-time and Part-time Employees in Horticultural Businesses

Arborist Service

- Tree Surgeon
- Tree Surgeon Helper
- Foreman
- Laborer

Percent Full-Time= 81%
Percent Part-Time= 19%

Farm and Garden Supply

- Manager
- Assistant Manager
- Sales Clerk
- Secretarial Help
- Accountant

Percent Full-Time- 69%
Percent Part-Time= 31%

Golf Course Management

* Course Superintendent
* Equipment Operator
* Greenskeeper
* Laborer, Golf Course
* Landscape Gardner
* Mechanic

Percent Full-Time= 50%
Percent Part-Time- 50%

Greenhouse Production

* Manager
* Assistant Manager
* Sales Clerk
* Deliveryman
* Greenhouse Worker
* Grower
* Plant Propagator
* Bedding Plant Grower
* Cut Flower Grower
* Pot Plant Grower

Percent Full-Time- 50%
Percent Part-Time- 50%

LANDSCAPE SERVICE

- Manager
- Assistant Manager
- Landscape Architect
- Salesman
- Laborer
- Truck Driver
- Equipment Operator

Percent Full-Time= 35%
Percent Part-Time= 65%

HIGHWAY AND PARK MANAGEMENT

- Park Manager
- Assistant Manager or Foreman
- Landscape Gardener
- Equipment Operator
- Mechanic
- Truck Driver
- Laborer
- Tree Trimmer
- Public Relations Personnel
- Landscape Architect

Percent Full-Time= 80%
Percent Part-Time= 20%

RETAIL FLORIST

* Manager
* Assistant Manager
* Sales Clerk
* Floral Designer
* Deliveryman
* Accountant
* Secretarial

Percent Full-Time= 64%
Percent Full-Time= 36%

NURERY PRODUTION

* Manager
* Assistant Manager
* Equipment Operator
* Mechanic
* Truck Driver
* Nursery Worker
* Plant Propagator

Percent Full-Time- 47%
Percent Full-Time- 53%

WHOLESALE FLORIST

- Manager
- Assistant Manager
- Bedding Plant Grower
- Pot Plant Grower
- Accountant
- Salesman
- Secretary
- Cut Flower Grower
- Deliveryman
- Buyer

Percent Full-Time= 71%
Percent Full-Time= 29%

TASKS PERFORMED BY HORTICULTURAL WORKERS

TASKS PERFORMED BY FARM AND GARDEN SUPPLY LABOR EMPLOYEES

Task	Frequency Performed
Identify customer needs and wants	Weekly
Take orders for sales or service by telephone	Monthly
Answer customer inquiries by phone	Weekly
Use effective interpersonal relationships in dealing with customers	Monthly
Use cash register or others sales recording device	Weekly
Use credit sytems of payment	Monthly
Verify customer addresses using directories	Weekly
Keep price lists and catalogs current	Monthly
Keep records of receipts and expenses	Weekly
Make out and mail bills to collect accounts due	Monthly
Check credit references of customers	Monthly
Perform filing tasks	Weekly
Perform typing and mailing tasks	Daily
Keep employee work records	Monthly
Prepare employee payroll	Monthly
Pay accounts payable	Monthly
Keep customer credit records	Weekly

Use adding machine and/or other tabulation devices in balancing accounts	Daily
Check received merchandise againt invoice listings	Monthly
Check invoices for math errors	Monthly
Keep work, storage, and delivery areas neat and clean	Monthly

TASKS PERFORMED BY RETAIL FLORIST MANAGEMENT AND EMPLOYEES

Task	Frequency Performed
Describe to customers the purposes and qualities of merchandise for sale	Daily
Identify customer needs and wants	Daily
Use telegram and telephone to accept and send customer orders	Daily
Follow-up sales to determine customer satisfaction	Weekly
Give estimates on costs of flowers and plants for weddings, funerals, etc.	Daily
Identify horticultural plants	Daily
Use effective interpersonal relationships in dealing with customers	Daily
Interpret plant and flower care instructions to the customer	Daily
Use supplier advertising materials	Weekly
Use credit systems of payment	Weekly
Label and price mark merchandise	Weekly
Use cash register or others sales recording device	Daily
Display store merchandise for sale	Weekly
Wrap and package flowers sold	Daily
Ship and deliver merchandise	Weekly
Stock shelves	Weekly

Explain and demonstrate the use of accessory sales items: candles, vases, cards, candy, etc.	Weekly
Verify customer addresses using directories	Daily
Identify flower and plant insect and disease infestations	Weekly
Write up customer orders	Daily
Use FTD's speedy gift service	Monthly
Select flowers and foliage for arrangements	Weekly
Spray faint floral products	Weekly
Decorate rooms with flowers and plants	Monthly
Construct floral arrangements for store sales	Monthly
Set up displays at funeral homes and churches	Monthly
Display flowers, plants, and supplies	Weekly
Design floral arrangements to meet customer specifications	Weekly
Keep records of receipts and expenses	Weekly
Make out and mail bills to collect accounts due	Monthly
Check credit references of customers	Weekly
Perform filing tasks	Monthly
Keep employee work records	Monthly
Prepare employee payroll	Monthly
Pay accounts payable	Monthly
Keep customer credit records	Monthly
Use adding machine and/or other tabulation devices in balancing accounts	Weekly

Keep current inventory of merchandise for sale	Weekly
Check invoices for math errors	Weekly
Store flowers and other plants	Weekly
Arrange for transportation of materials purchased	Weekly
Order replacement and/or new merchandise for sale	Weekly
Prepare advertising materials	Monthly
Keep price lists and catalogs current	Monthly
Keep work, storage, and delivery areas neat and clean	Weekly
Clean and sharpen hand tools	Monthly
Keep customer areas neat and clean	Weekly
Understand and comply with business laws	Weekly
Identify labor needs	Weekly
Recruit employees	Monthly
Interview and select employees	Monthly
Designate employee work assignments	Daily
Supervise employees	Daily
Train new employees	Weekly
Evaluate employee performance	Weekly
Perform personnel actions such as promoting or firing	Monthly
Establish employee wages, hours, and working conditions	Monthly
Determine business credit needs	Monthly
Select and purchase equipment and expandables not for sale	Monthly

Determine kinds and amounts of flowers and plants to stock	Weekly
Identify and select producers and suppliers of flowers, plants, and materials	Weekly
Establish and enforce safety regulations	Weekly
Allocate monies in preparing working budget	Monthly
Analyze the business enterprises on cost and return basis	Monthly
Plan business advertising	Monthly
Negotiate sales contracts	Monthly

TASKS PERFORMED BY RETAIL FLORIST LABOR EMPLOYEES

Task	Frequency Performed
Describe to customers the purposes and qualities of merchandise for sale	Weekly
Identify customer needs and wants	Weekly
Use telegram and telephone to accept and send customer orders	Weekly
Follow-up sales to determine customer satisfaction	Monthly
Give estimates on costs of flowers and plans for weddings, funerals, etc.	Weekly
Identify horticultural plants	Weekly
Use effective interpersonal relationships in dealing with customers	Daily
Interpret plant and flower care instructions to the customer	Weekly
Use supplier advertising materials	Monthly
Use credit systems of payment	Monthly
Label and price mark merchandise	Weekly
Use cash register or other sales recording device	Weekly
Display store merchandise for sale	Weekly
Wrap and package flowers sold	Daily
Ship and deliver merchandise	Monthly
Stock shelves	Weekly

Explain and demonstrate the use of accessory sales items: candles, vases, cards, candy, etc.	Weekly
Verify customer addresses using directories	Weekly
Identify flower and plant insect and disease infestations	Monthly
Write up customer orders	Weekly
Use FTD's speedy gift service	Monthly
Select flowers and foiliage for arrangements	Weekly
Spray paint floral products	Monthly
Decorate rooms with flowers and plants	Monthly
Construct floral arrangements for store sales	Monthly
Display flowers, plants, and supplies	Weekly
Design floral arrangements to meet customer specifications	Monthly
Check credit references of customers	Monthly
Perform filing tasks	Monthly
Store flowers and other plants	Monthly
Keep work, storage, and delivery areas neat and clean	Weekly
Keep customer areas neat and clean	Weekly

TASKS PERFORMED BY
GREENHOUSE PRODUCTION MANAGEMENT AND SALES EMPLOYEES

Task	Frequency Performed
Identify types of horticultural plants	Monthly
Control temperature with fans and heaters	Monthly
Identify and remove diseased plants	Monthly
Cut flowers and plants	Monthly
Bunch, pack, or wrap flowers and other plants	Monthly
Place cut flowers in environmental storage	Monthly
Remove dead and diseased blooms and plant parts	Monthly
Pack care isntructions with plants	Monthly
Describe to consumers the purposes and qualities of merchandise for sale	Daily
Identify customer needs and wants	Daily
Take orders for sales by telephone	Daily
Follow-up sales to determine customer satisfaction and as a guide for next year's plantings	Monthly
Make cost estimates on customer orders	Daily
Identify horticultural plants	Weekly
Use effective interpersonal relationships in dealing with customers	Daily
Prepare advertising materials	Monthly
Demonstrate arrangement features of products	Weekly
Write up customer orders	Daily

Advise customers on environmental control and shelf life of plants	Daily
Send plant care instructions to retailers	Monthly
Keep price lists and catalogs current	Monthly
Keep records of receipts and expenses	Monthly
Check credit references of customers	Monthly
Perform filing tasks	Monthly
Use adding machine and/or other tabulation devices in balancing accounts	Monthly
Quality sort prior to shipment	Monthly
Make out shipping labels and invoices	Monthly
Package orders for shipment	Monthly
Arrange transportation for shipments of plant materials	Monthly
Keep current inventory of plants and supplies for sale	Monthly
Check received merchandise against invoice listings	Weekly
Check invoices for math errors	Monthly
Store received materials and supplies	Monthly
Keep work, storage, and delivery areas neat and clean	Weekly
Understand and comply with business laws	Monthly
Designate employee work assignments	Weekly
Supervise employees	Weekly
Train new employees	Monthly
Evaluate employee performance	Weekly
Perform personnel actions such as promoting and firing	Monthly

Select and purchase plants, seeds, fertilizer, and equipment	Monthly
Determine kinds and amounts of flowers and other plants to stock	Monthly
Identify and select producers and suppliers of flowers, plants, and materials	Monthly
Establish and enforce safety regulations	Monthly

TASKS PERFORMED BY GREENHOUSE PRODUCTION LABOR EMPLOYEES

Task	Frequency Performed
Identify greenhouse soil matrials	Monthly
Determine soil mix for specific plant requirements	Monthly
Shred or screen the soil	Monthly
Mix the soil with plant growing materials	Monthly
Fill benches and pots	Monthly
Mix fertilizer into soil	Monthly
Level the soil surface	Monthly
Pencil label planted specimens	Monthly
Identify types of horticultural plants	Monthly
Water nursery stock	Monthly
Fertilize plants	Monthly
Control temperature with fans and heaters	Monthly
Control humidity with ventilating fans and humidifiers	Monthly
Control both the type and amount of light	Monthly
Identify and remove diseased plants	Monthly
Control plant insects and diseases with chemicals	Monthly
Remove plants from beds	Monthly
Cut flowers and plants	Weekly
Pot flowering plants for sale	Monthly

Label harvested plants by common names	Monthly
Bunch, pack, or wrap flowers and other plants	Monthly
Place cut flowers in environmental storage	Monthly
Remove dead and diseased blooms and plant parts	Weekly
Pack care instructions with plants	Monthly
Describe to consumers the purposes and qualities of merchandise for sale	Monthly
Identify customer needs and wants	Monthly
Take orders for sales by telephone	Monthly
Make cost estimates on customer orders	Monthly
Identify horticultural plants	Monthly
Use effective interpersonal relationships in dealing with customers	Monthly
Demonstrate arrangement features of products	Monthly
Write up customer orders	Monthly
Advise customers on environmental control and shelf life of plants	Monthly
Package orders for shipment	Monthly
Arrange transportation for shipments of plant materials	Monthly
Deliver flowers and/or other plants to wholesaler and/or retailer	Monthly
Clean and sharpen hand tools	Weekly
Light maintenance of business vehicle or tractor; oil level, tire pressure, battery and radiator water levels	Monthly
Repair frames, benches, and other greenhouse structures	Monthly

Check received merchandise against invoice listings	Monthly
Store received materials and supplies	Monthly
Arrange for transportation of plant materials and supplies	Monthly
Keep work, storage, and delivery areas neat and clean	Daily

TASKS PERFORMED BY NURSERY PRODUCTION MANAGMENT AND SALES EMPLOYEES

Task	Frequency Performed
Water nursery stock	Monthly
Identify common insect and disease pests on ornamental shrubs	Monthly
Describe to customers the purposes and qualities of plants for sale	Weekly
Identify customer needs and wants	Monthly
Take orders for sales by telephone	Weekly
Follow-up sales to determine satisfaction and as a guide for determining next year's plantings	Monthly
Make cost estimates on customer orders	Monthly
Identify horticultural plants	Monthly
Solicit sales by telephone	Monthly
Use effective interpersonal relationships in dealing with customers	Monthly
Use supplier advertising materials including catalogs	Monthly
Write up customer orders	Monthly
Keep records of receipts and expenses	Monthly
Perform filing tasks	Monthly
Use adding machine and/or other tabulation devices in balancing accounts	Monthly
Check received merchandise against invoice listings	Monthly
Store received materials and supplies	Monthly

Arrange for transportation of plant materials and supplies	Monthly
Order seed, fertilizer, and/or plant materials	Monthly
Keep current inventory of repair parts, fertilizer, seed, and other supplies	Monthly
Keep work, storage, and delivery areas neat and clean	Monthly
Clean and sharpen hand tools	Monthly
Understand and comply with business laws	Weekly
Identify labor needs	Weekly
Recruit employees	Monthly
Interview and select employees	Monthly
Designate employee work assignments	Weekly
Supervise employees	Weekly
Train new employees	Weekly
Evaluate employee performance	Weekly
Perform personnel actions such as promoting and firing	Monthly
Establish employee wages, hours, and working conditions	Monthly
Select and purchase plants, fertilizer, and equipment	Monthly
Establish and enforce safety regulations	Monthly

TASKS PERFORMED BY NURSERY PRODUCTION LABOR EMPLOYEES

Task	Frequency Performed
Water nursery stock	Monthly
Prune and trim plants	Monthly
Dig up trees and shrubbery	Monthly
Keep work, storage, and delivery areas neat and clean	Monthly
Clean and sharpen hand tools	Monthly

TASKS PERFORMED BY LANDSCAPE SERVICE LABOR EMPLOYEES

Task	Frequency Performed
Keep work, storage, and delivery areas neat and clean	Weekly
Clean and sharpen hand tools	Weekly
Perform light maintenance of business vehicle or tractor - oil level, tire pressure, battery, and radiator water levels	Weekly
Perform minor tune-up of business vehicle or tractor by replacement of spark plugs and ignition points	Monthly
Change oil and grease business vehicle or tractor	Monthly
Operate business vehicle with a standard transmission	Monthly
Clear brush and unwanted plants	Monthly
Cut and remove trees	Monthly

TASKS PERFORMED BY
FARM AND GARDEN SUPPLY MANAGEMENT AND SALES EMPLOYEES

Task	Frequency Performed
Identify customer needs and wants	Daily
Take orders for sales or service by telephone	Daily
Follow-up sales to determine customer satisfaction	Weekly
Make cost estimates on customer orders	Weekly
Describe to customers the purposes and qualities of merchandise for sale	Daily
Identify horticultural plants	Weekly
Answer customer inquiries by telephone	Daily
Use effective interpersonal relationships in dealing with customers	Daily
Prepare advertising materials	Monthly
Use supplier advertising materials	Weekly
Use various types of advertising such as mail, radio, and newspaper ads	Monthly
Label and price mark merchandise	Weekly
Use cash register or other sales recording device	Daily
Display store merchandise for sale	Weekly
Wrap and/or package merchandise sold	Weekly
Stock shelves	Weekly
Use credit systems of payment	Weekly
Deliver or ship merchandise sold	Weekly

Demonstrate use of equipment and tools	Weekly
Arrange trade-ins and credit terms	Monthly
Make fertilizer and seed calculations for customers based on recommendations	Weekly
Identify and name horticultural plant disease and insect infestations	Monthly
Use recommendations for control of plant disease and insects in advising customer purchases	Weekly
Verify customer addresses using directories	Weekly
Use handout materials in answering customer inquiries	Weekly
Keep price lists and catalogs current	Weekly
Rent equipment to customers	Monthly
Keep records of receipts and expenses	Monthly
Perform filing tasks	Monthly
Perform typing and mailing tasks	Monthly
Use adding machine and/or other tabulation devices in balancing accounts	Monthly
Keep current inventory of merchandise for sale	Weekly
Check received merchandise against invoice listings	Weekly
Check invoices for math errors	Monthly
Store received merchandise	Weekly
Arrange for transportation of materials purchased	Monthly
Order replacement and/or new merchandise for sale	Weekly
Keep work, storage, and delivery areas neat and clean	Weekly
Keep merchandise and customer areas neat and clean	Weekly

Water and care for plants on display and/or storage	Monthly
Follow safety factors in pesticide applications	Monthly
Understand and comply with business laws	Monthly
Identify labor needs	Monthly
Designate employee work assignments	Weekly
Supervise employees	Weekly
Train new employees	Monthly
Evaluate employee performance	Monthly
Determine kinds and amounts of equipment to buy and stock	Monthly
Identify and select producers and suppliers of equipment and plants	Monthly
Establish and enforce safety regulations	Monthly

BUILDING YOUR RESUME

A resume is the first tangible step in the job search. Following are some areas to consider when approaching this task:

1. There are no hard and fast rules. An effective resume reflects your "uniqueness" as an individual. IT IS YOUR STORY.
2. Three major parts to a college resume:
    a. Education
    b. Experience - work and college/high school activities
    c. Personal
3. Education
    a. Academic honors
    b. Schools attended
    c. High school information
4. Work experience - may be short here
    a. Include part-time and full-time (of any length), i.e. probably 2 weeks and longer
    b. Put time period, e.g. Summer 1978 or December 1977-June 1978, etc.
    c. Put most recent first or most important first
    d. Indicate your job title (if any) and a summary of responsibiities. Example:

        Central Iowa Bottling Company, Ames, Iowa. (June 1978 to August 1978) Delivery person: delivered pop, serviced vending machines, and maintained customer accounts.

e. Farm background. Put some descriptions on type of farm. Example:

Grew up on a 480 acre farm. Experiences included work with crops, hogs, and beef cows.

f. Student activities - high school

(1) Optional

(2) 4-H/FFA

(3) Show leadership responsibilities

5. Personal

a. Areas to consider including:

Date of birth
Height
Weight
Health
Marital status
Special interests/hobbis

b. Permanent address and telephone

c. References:

Two view points

If you include, be detailed (name, position, address and telephone number

No magic number on how many (three is a good figure)

Should be people who knew you during the last few years

Combination of academic and work

   - d. Employment objective/Position desired/Job Objective, etc.

     If included, be specific

     If can't be specific, consider leaving out

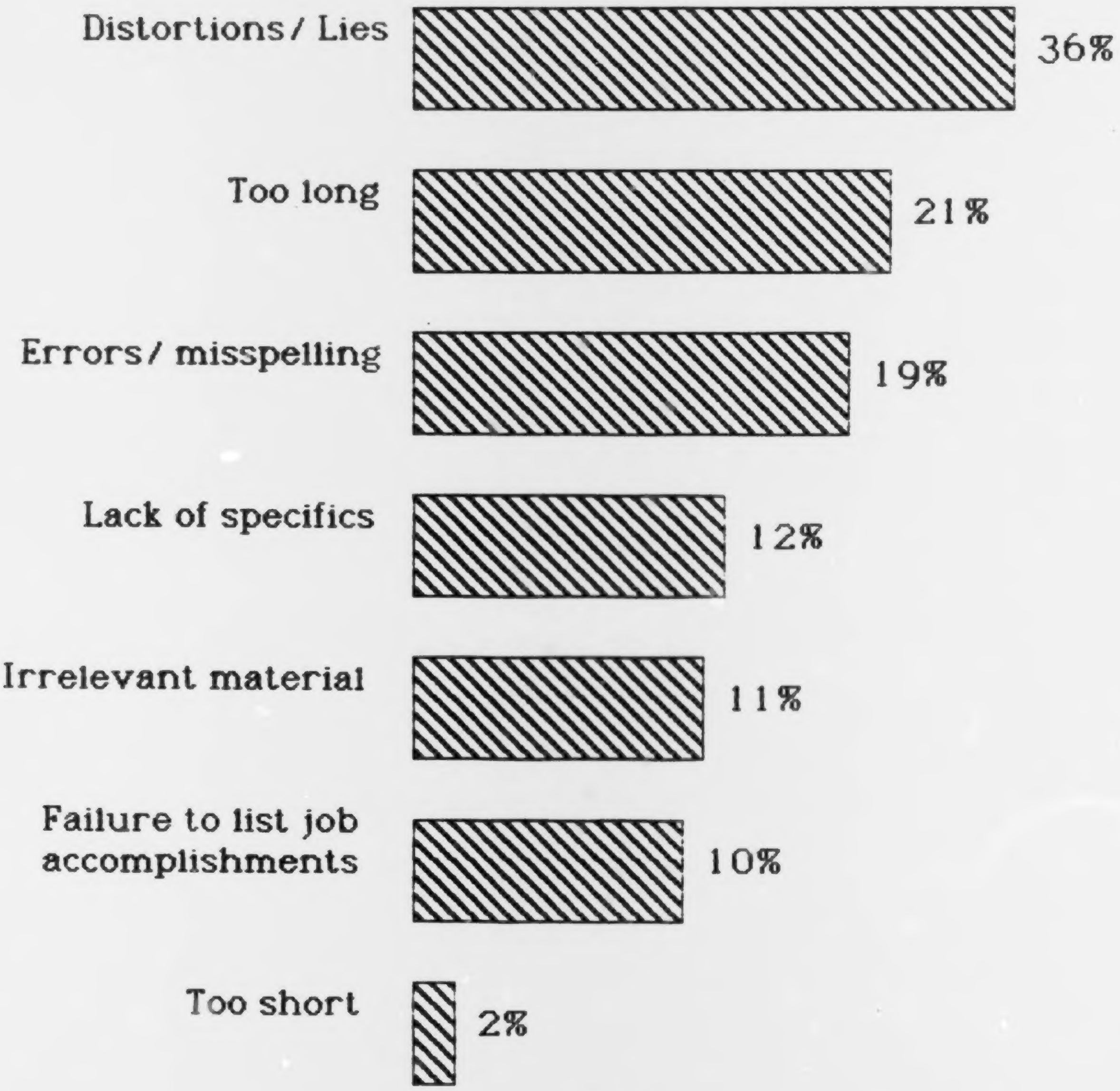
   - e. Photograph (optional)

6. Miscellaneous

   - a. Date resume prepared

   - b. Date available for employment

The Trouble With Resumes



Employers find interesting reading between lines of applicants' resumes

Judging from the resumes that have crossed my desk over the past 15 years, I perceive that there is a lot of misconception out there about life in the world of work.

Take this example: The resume is neatly typed; there are no misspelled words or typographical errors; and the work experience and educational background categories are organized in chronological order. The problem is that the applicant's athletic experience takes up 10 lines — compared with four lines of work experience. If I were looking for a slam-dunk specialist, I might call this guy in for an interview. But I needed a reporter who could break down an annual report, not a man-to-man defense. One more resume for the circular file.

Apparently there is the belief out there among some college and high school grads that managers hire people based on their athletic accomplishments, exciting hobbies and glowing personalities rather than their ability to do a job. Most managers who are in the position to hire people are not impressed by an applicant's ability to sail a catamaran or break par. It's fine to note such things, but don't dwell on them. Some managers might view those things as a possible work diversion.

Dick Marlowe

BUSINESS

A lot of young people write in their resumes with a great deal of pride that they enjoy "working with people." This line could be eliminated, I think, because most of us in the working world are expected to work with people whether we enjoy it or not, and because relatively few of us work in a zoo.

It always amuses me when someone writes in "willing to learn" even though the resume proves conclusively that the person who sent it in has successfully avoided the process up until now. Misspelled words, bad grammar and pizza stains on a resume are a dead giveaway.

But the time has finally come, and you are ready to prepare the dreaded resume. Here are a few tips from a survey of the people at the nation's 1,000 largest corporations who make hiring decisions:

What they want is a resume that is short, neat, honest and relevant. Conducted for job recruiters Robert Half Inc. by an independent research company, the survey concludes that a one- or two-page resume is preferable to an autobiography. While a two-page resume is expected from upper- and middle-management candidates, a one-page resume will do very well for staff employees. If you really want the job, follow those simple rules.

On the other hand, if you do not want the job and are simply sending in resumes to get your parents off your back, here are the things that personnel department hate in resumes:

- Distortions or lies.
- Too long.
- Messy, typographical errors and misspelled words.
- Not enough specific information.
- Irrelevant material.
- Failure to list job accomplishments.
- Too short.

Some people may have to lie in their resumes, I guess. Either that or leave the spaces blank under the categories "work experience" and "accomplishments."

While there are some helpful tips offered by personnel directors, it is my feeling that the survey missed the chance to make a good point. No matter how professionally your resume is done, it cannot cover up a squandered youth. Job preparation does not begin with learning how to write a resume — and you can't write a good one unless you have the ingredients that go into it.

Maybe it would be a good exercise for every boy and girl to have to write a resume every year beginning at, say, around 12 years old. In that way, they would not only be able to write a good resume by the time they went out looking for a job, they would also be forced to pay some attention to their own value and shortcomings when they set out to market themselves as employees.

Amount Purchased
435

How To Sell Yourself To An Employer

1 Study your qualifications and abilities and arrange this knowledge in your mind so that you can present it briefly and clearly during the interview.

2 Learn as much as you can beforehand about the firm to which you apply. Do not be afraid to ask questions about the company or the job.

3 Be prompt. Keep your appointments to the minute.

4 Make a presentable appearance. Be neat, clean, and dress appropriately. Do not overdress or wear showy clothes. Women should avoid appearing overly made-up.

5 The employer wants to talk to you. Refrain from taking anyone with you when you apply for a job.

6 Watch your posture. Do not slouch or yawn or display signs of nervousness.

7 Answer all the employer's questions accurately, honestly, frankly and promptly. Never Brag.

8 Be able to give a continuous record of all your jobs, dates of employment, wages received, the exact nature of your work and the reasons you left. This information is important to the employer.

9 When asked, point out the value derived from your training and past experience which will carry over to the job you are seeking.

10 Be able to give as references the names of three responsible and reliable people who know you well.

11 Speak with a feeling of confidence and enthusiasm. Do not bluff or exaggerate. Use good English, speak distinctly, but be careful you don't talk too much.

12 Avoid any arguments with your prospective employer.

13 Do not criticize others, including past employers or associates.

14 Avoid mention of your personal, domestic, or financial troubles. The employer is interested primarily in your ability.

15 Show proper respect for the person interviewing you. Do not become familiar by addressing him as "Mac" or "Buddy".

16 Do not become discouraged if, during your first interview, you become nervous and fail to present yourself favorably, you will improve the next time.

17 Even if the prospect of an immediate job is not possible, the interviewer's advice regarding future openings can sometimes lead to a job later on.

18 Be certain that you like and can do the work you are applying for.

Eight Keys to Employability

1. Personal Values

Valued workers:

- Are honest.
- Have good self-esteem and a positive self-image.
- Have personal and career goals.
- Demonstrate emotional stability.
- Exhibit a good attitude.
- Are self-motivated.
- Do not limit themselves.

2. Problem-Solving and Decision-Making Skills

Valued workers:

- Are flexible.
- Are creative and innovative.
- Can adapt to changing demands of a job.
- Can plan and organize work.
- Can reason and make objective judgments.
- Keep their mind on several parts of a job at a time.

3. Relations with Other People

Valued workers:

- Work well with peers.
- Accept authority and supervision.
- Accept constructive criticism.
- Are team workers.
- Are friendly.
- Are consistent in their relations with people.
- Are cooperative.
- Accept assignments pleasantly.
- Are tactful.
- Accept all types of people.
- Respect the rights and property of other people.
- Have leadership qualities.

4. Communication Skills

Valued workers:

- Ask questions.
- Seek help when needed.
- Notify supervisors of absences and the reasons for absences.
- Clearly express themselves orally.
- Listen well.

5. Task-Related Skills

Valued workers:

- Complete work on time.
- Can follow oral, visual, written, and multi-step directions.
- Are not distracting or distractible.
- Work neatly.
- Stick with a task and keep busy.
- Are precise and meticulous.
- Care for tools and materials.
- Are accurate.
- Constantly improve their performance.

6. Maturity

Valued workers:

- Work well without supervision
- Are reliable and dependable.
- Accept responsibility.
- Don't let their personal problems interfere with their work.
- Are willing to perform extra work and work overtime.
- Are always prepared for work.
- Show pride in their work.
- Show initiative.
- Remain calm and self-controlled.
- Accept responsibility for their own behavior.
- Demonstrate maturity in thoughts, actions and deeds.
- Evaluate their own work.
- Are patient.
- Use time wisely.
- Are assertive when necessary.
- Show self-confidence.

7. Health and Safety Habits

Valued workers:

- Observe safety rules.
- Maintain a good work pace and production rate.
- Practice good personal hygiene.
- Dress appropriately and are well groomed.
- Perform well under stress and tension.
- Have appropriate physical stamina and tolerance for the kind of work they are doing.
- Are in good health.

8. Commitment to Job

Valued workers:

- Are punctual and have good attendance records.
- Observe all organization policies.
- Consider their work more than a job.
- Are interested and enthusiastic.
- Want to learn more.
- Exhibit loyalty to the organization and its employees.
- Give their best efforts consistently and strive to please.
- Show concern for their future career with the organization.

Source: "They're Trained, But Are They Employable", Vocational Education Journal, Aug. 1987

Preparing For An Interview*

The employment interview is one of the most important events in a person's experience. The 20 to 30 minutes spent with the interviewer may determine the entire future of one's life. As a result, it is important to be prepared.

Here are some things you can do to get yourself ready:

1. Make a last-minute check of personal appearance before leaving home.
2. Go to the interview unaccompanied.
3. Allow yourself plenty of time to arrive for the interview.
4. Greet the interviewer with a warm smile and firm hand shake.
5. Call the interviewer by name.
6. Be seated only after the interviewer asks you to do so.
7. Sit and stand erect; don't lean against the wall, a chair, or a desk.
8. Let the employer take the lead in the conversation.
9. Answer all questions briefly but completely.
10. Be polite and courteous; do not interrupt!
11. Have a resumé and examples of work available for quick reference.
12. Make an extra effort to express yourself clearly. Take time to think through your answers, use proper grammar, don't swear, avoid the use of slang, and look the interviewer in the eye.
13. Be sincere and enthusiastic.
14. Avoid smoking, chewing gum, eating candy, giggling, and squirming in the chair.
15. Don't try to flatter the interviewer.
16. Tell the truth about yourself and your experiences.
17. Speak well of former employers and associates.
18. Be positive.
19. Watch for a sign that the interview is over.
20. Thank the interviewer for his time.
21. Leave promptly.

If you do not get the job, these might be some of the reasons:

1. Poor grooming habits.
2. Poor character: chip on your shoulder, bad attitude toward work, overly emotional, late for the interview, belittled previous employers and acquaintances.
3. Sloppy writing on application blank: didn't follow directions, didn't answer all questions, didn't write clearly, or didn't spell correctly.
4. Did not tell the truth.
5. Overly fussy about working conditions.
6. Poor school records, bad grades, too many absences or tardies.

*Source: Adapted from Job Application and Interview, Instructional Materials Laboratory, University of Missouri, Columbia, Missouri.

Ready for your job interview?
You've got 5 minutes to succeed

By Don Oldenburg

Hanging on the wall of one corporate personnel waiting room is a full-length mirror with a sign asking, "Would you hire this person?"

An intimidating prank:

Not necessarily so. Recent research suggests that a brief glance in a mirror provides only a little less "data" than what many employers use to decide whether or not to hire an applicant.

"They tend to base their decisions primarily on first impressions, not on resumes or credentials," says Janet Elsea, author of "The Four-Minute Sell: How to Make a Dynamic First Impression" (Simon and Schuster, $12.95). "Usually they make up their minds within the first five minutes of meeting you."

Elsea, president of Communication Skills Inc., a Washington-based consulting firm, says most of us know intuitively that appearance, body language, tone of voice and choice of words are critical to making a good first impression. But many promising careers are sidetracked, promotions lost and business relationships damaged, she says, because people don't know how to use good communications strategies.

"The fortune cookie is right," says Elsea. "You don't get a second chance to make a good first impression." And what the fortune cookie doesn't tell you: in first encounters, you get only two to four minutes to make an impression.

"Studies show that people immediately focus on what they can see--age, gender, color of skin, appearance, facial expressions, eye contact, even posture," says Elsea, a former professor of speech communications at Arizona State University. "A number of experts believe what you look like constitutes more than half the total message of a first impression."

Next, people focus on what they hear. Our speaking voices--rate, loudness, pitch, tone and articulation--give additional clues to our personalities.

"The voice alone--not the words--conveys as much as 38 percent of the meaning in face-to-face interactions," says Elsea. "Nonverbal and vocal communications constitute more that 90 percent of the message during the first moments."

Last and least important is what you say. If people can't get past your visual and auditory impression, they're not going to listen to your words.

In a world where packaging often supersedes content, Elsea says she is "amazed" by the number of intelligent people who have their thoughts in order but don't have a clue as to what they look or sound like.

"I want people to be able to answer key questions about themselves," she says. "What does my face say when I'm disturbed? What do I look like from behind? What does my voice sound like when I'm nervous? What kind of language do I use? Making good first impressions is a matter of raising our consciousness about ourselves."

In workshops with clients such as Honeywell, the World Bank and the Smithsonian Institution, Elsea regularly videotapes sessions to familiarize people with themselves. It can be a tough lesson.

Her message: Modify your behavior to tailor the first impression you want to make. A few of her pointers:

*Look at yourself on film or videotape, moving, gesturing, interacting with others. Candid photographs of yourself in action are next best. As a last resort, study yourself in a full-length mirror. What looks good, and why? Clothes? Weight? Hair style? What looks bad? Change it.

*Remember that your face is the most controllable nonverbal cue, and also the one people rely on to gauge your attitude. Smiling and head-nodding are the most powerful nonverbal cues.

*Record your voice in a conversation. Does it zip along too rapidly, or is it slow and monotonous? Count your words per minute (the average rate is 130 to 160 words per minute) and vary your speed. Try talking a little faster (160 to 200 words per minute), which is regarded as intelligent and convincing.

*Choose the name you use according to kind of first impression you want to make. Formal names like James or Janet suggest conscientiousness and emotional stability, but less extroverted than familiar names like Jim or Jan, or adolescent ones like Jimmy and Jannie.

"Preparation and practice is the key in making new behaviors you choose part of your automatic response system," says Elsea.

Des Moines Sunday Register, July 21, 1985, p. 9E

The Interview: Some Points to Remember

Analyze Strengths and Weaknesses. In preparing for interviews, start by doing some solid, honest self-assessment. Analyze your strengths and weaknesses, your background, your academic performance, your vocational interests, and your personal aspirations and values. In other words, begin to formulate, in your own mind, not only what you would like to do but also what you feel you are best prepared to do.

Read Employer Literature. Next, study your prospective employers. It is imperative that you have some knowledge about their policies, philosophies, products, and services. Failure to do your homework before an inteview can be the kiss of death. Nothing turns recruiters off faster.

Dress in Good Taste. Although most employers are becoming more liberal in their standard of dress and appearance, let basic good taste be your guide. If a beard or "Alice-in-Wonderland" look is going to jeopardize your chances for a job, that's your decision. With some employers, appearance could be the deciding factor. The question you have to ask yourself is, "How important is it?"

Be Yourself. Your attitude is going to influence the interviewer's evaluation. Don't try to be something you aren't . . . just be yourself. Emphasize your strong points and remember that the recruiter is looking for inherent personal energy and enthusiasm. The interview is your opportunity to sell a product and that product is *you!*

Dwell on the Positive. Try always to dwell on the positive. While past failures and shortcomings need not be volunteered, don't try to cover them up or sidestep them. Should recruiters ask about them, try to explain the circumstances rather than give excuses or blame others. Remember, they're human, too . . . and probably have made a few mistakes. You'll create a better impression by being honest and candid.

Ask Questions—When Indicated. If appropriate, ask meaningful questions, particularly if you're not clear about the details of the job, the training program, or other job-related concerns. But, don't ask questions just because you think that's what is expected.

Follow Up. Finally, follow up on the interview. Provide whatever credentials, references, or transcripts are requested by the prospective employer as soon as possible. Be sure to write down the name, title, and address of the recruiter. You may want to consider a brief typed letter of appreciation for the interviewing opportunity.

Use Your Career Planning and Placement Office. These are, of course, only general suggestions and observations. For more detailed and personalized advice, take advantage of the services of your college's career planning and placement office.

Reprinted from the College Placement Council's pamphlet, "The Campus Interview."

INTERVIEW QUESTIONS TO EXPECT

PERSONAL

Tell me about yourself.
How would you describe yourself?
How do you think a friend or professor that knows you well would describe you?
What qualifications do you have that makes you think that you will be successful in business?
What are your greatest strengths?
What are your weaknesses?
How do you handle pressure and stress?
What do you do in your spare time?
In what kind of work environment are you most comfortable?
Would you rather work alone or in a team?
Do you prefer creative or routine work? Why?
Are you a generalist or a specialist?
Why did you select your college or university?
What changes would you make in your college or university?
What led you to choose your field of major study?
If you could do so, how would you plan your acadmeic study differently? Why?
Do you have any plans for continued study? An advanced degree?
What college subjects did you like least? Why?
What college subjects did you like the most? Why?
To what professional associations do you belong?
Tell me about positions of leadership that you have held.

GOALS

What are your long and short range goals and objectives?
When and why did you establish these goals and how are you preparing yourself to acheive them?
What specific goals, other than those related to your occupation, have you established for yourself for the next ten years?
How do you plan to achieve those goals?
Do you think that you set your goals high enough? Tell me about the most successfully attained difficult goal that you set for yourself.
What do you see yourself doing five years from now?

What do you really want out of life?
How long do you plan to stay in your first position?
What are your salary expectations? What do you base that on? What do you expect to be earning in five years?

POSITION

Why did you choose the career for which you are preparing?
How would you describe the ideal position for you following graduation?
In what ways do you think you can make a contribution to our company?
Why did you decide to seek a position with this company?
What interests you most about the available position?
If you were hiring a graduate for this position, what qualities would you look for?
What qualities do you possess that would make you the most qualified candidate for this position?
Why should we hire you?
Tell me your concept of the position we are recruiting for.
What do you know about our company?
What two or three things are most important to you?
What criteria are you using to avaluate the company for which you hope to work?
Tell me about your job search.

THOUGHT

What are the most important rewards you expect in your business career?
How has your college experience prepared you for a business career?
How do you determine or evaluate success?
What do you think it takes to be successful in a company like ours?
What two or three accomplishments have given you the most satisfaction? Why?
Describe your most rewarding college experience.
What major problem have you encountered and how did you deal with it?
What have you learned from your mistakes?

List three one word objectives to describe yourself and tell me how those adjectives would prove success in this position.
What motivates you to put forth your greatest effort?
What challenges you in life?
What qualities should a successful manager possess?
Describe the relationship that should exist between a supervisor and those reporting to him or her.
How would you define leadership?
Tell me about a situation in which you applied yourself and tell me the results of your efforts.
What is the hardest work you have ever had to do?
What is the toughest decision you have ever had to make?
Do you have any geographic preferences? Why?
How do you feel about relocation?
Are you willing to travel?
How do you feel about long hours?

TYPICAL QUESTIONS ASKED OF CANDIDATES:

1. How would you describe yourself as a person?

2. What two or three accomplishments have given you the most satisfaction? Why?

3. In what ways do you think you can make a contibution to our organization?

4. Why do you want to work for us?

5. Tell me about yourself.

6. What are your strengths and weaknesses?

7. How do you spend your spare time?

8. If you could construct your own job, within our organization, what factors would you include?

9. What are your short-term goals? Long-term?

TRAITS ON WHICH YOU WILL BE JUDGED:

1. PERSONAL CHARACTERISTICS. Do you have good grooming? Do you have good manners? Do you maintain good eye contact?
2. SELF-EXPRESSION. Are you forceful or vague in expressing your ideas and when responding to the interviewer's questions?
3. MATURITY. What about your overall sense of balance? Can you make value judgements and decisions?
4. PERSONALITY. What are you like? Shy? Outgoing? Overbearing? Quiet? Tactful? Enthusiastic? Warm? Do you have a good attitude?
5. EXPERIENCE. What about your academic achievements? Involvement in extra-curricular activities? Job accomplishments? Job skills?
6. ENTHUSIASM AND INTEREST. Are you really interested in the employer? The particular job? Industry? Are you just trying to get interviewing experience?
7. CAREER GOALS. What do you want to do in your professional life?

DO'S FOR THE JOB INTERVIEW:

* Be prepared to state your purpose when you arrive for the interview.
* Shake hands firmly and stand until offered a chair.
* Learn the interviewer's name and use it.
* Be pleasant and friendly but businesslike.
* Ask questions-after all, you want to make sure the job is right for you.
* Be positive, stress your strong points. Be honest about your weaknesses, but don't dwell on them.
* Be prepared to state the salary you want, but not until the employer has brought up the subject.
* Tell the employer you are interested in the job and why you think you are qualified.
* Remember to thank the employer for interviewing with you.
* If the employer does not tell you when you will hear about the job, ask when you may call to learn his decision.

DON'TS FOR THE JOB INTERVIEW:

* Never take anyone with you to an interview.
* Don't plead for a job or a chance.
* Never say "I'll take anything." Instead say that you will work hard, especially if there is a chance to move up.
* In dicussing jobs you held before, don't criticize former employees or co-workers.
* Don't discuss your personal problems, home problems, or money problems unless you are specifically asked. Try to answer only what relates to the job.
* Don't smoke, even if the interviewer does.
* Don't tell a prospective employer about other jobs you applied for and were turned down.
* Don't apologize for lack of experience or training: stress your strong points instead, such as your ability to learn quickly, assume responsibility, etc.
* Don't hang around after the interview is over.

PROBLEM AREA 3

WHAT OFFICE PROCEDURES MUST EMPLOYEES IN A HORTICULTURAL BUSINESS BE ABLE TO PERFORM?

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PROBLEM 3: What office procedures must employees in a horticultural business be able to perform?

INTEREST APPROACH:

Mr. James Bury of 118 Fifth Street, Knoxville, Iowa, made the following purchases from the Doud's Nursery on April 21, 1988:

100 lbs.	12-12-7 garden fertilizer @ $27/50# bag
1	Scarlet oak tree @ 9.98
3	Pink-flowering almond bushes @ 5.89 each
2	Staghorn sumacs @ 2.95 each

On his order he paid four percent sales tax and he paid by check. Steve Rowe, an employee of the Doud's Nursery made out the sales slip for the order. His sales slip is presented in INFO-1. Have students study Steve's sales slip and discuss their findings in class. Using ACT-2, complete a new sales slip correcting Steve's mistakes. Discuss with the class the importance of accuracy and completeness of business records to a horticultural business.

STUDY QUESTIONS:

1. How are sales properly recorded in a horticultural business?
2. What are the advantages and disadvantages of businesses selling on credit?
3. What are purchase orders and why are they important to the horticultural business?
4. What are sales taxes and how are they handled in horticultural businesses?
5. How is the daily cash flow in a horticultural business determined?
6. How are discounts used in horticultural businesses?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Apply general principles to particular situations. Student Learning Activity #5.

Use fundamental communication skills. Student Learning Activity #6.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Application of percentage concepts. Student Learning Activity #4.

Take clear and concise notes. Student Learning Activity #2.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determine the accuracy of a statement. Interest Approach.

Distinguish relevant from irrelevant information. Student Learning Activity #3.

STUDENT LEARNING ACTIVITIES:

1. Review and discuss TM-3 and 4. Review and discuss the steps in writing out a sales slip outlined in INFO-5 and TM-6. Have students complete ACT-7. Have students visit local horticultural businesses and secure blank sales slips used by these businesses. Compare them during class. Have students complete the daily sales distribution form, ACT-8a and 8b.

2. Invite a manager of a local horiticultural business to speak to the class about how he/she handles extending credit to customers in his/her business. Review and discuss TM-9 and 10. Review and discuss INFO-11. Using the sales slip prepared in Student Activity #1, enter the charges on these customer's accounts (ACT-12a and 12b).

3. Have students read INFO-13 and discuss the use of purchase orders by a business in class. Review and discuss TM-14 and have students complete ACT-15a and 15b.

4. Have students read the reference entitled "Sales and Use Tax Information Booklet." Have students complete ACT-16. Discuss with the class the importance of collecting taxes on purchases in horticultural businesses.

5. Review and discuss TM-17. Have students complete the cash flow problem outlined in ACT-18. Have students complete ACT-19 and 20.

6. Review and discuss TM-21. Have students complete ACT-22. Discuss students' responses and relate these examples to other types of discounts common in horticultural businesses.

CONCLUSIONS:

The sales ticket is the heart of the accounting system in horticultural businesses. All money transactions are recorded on sales tickets. They are the records for:

All the cash taken in during the day

The amount of merchandise sold which is necessary for inventory records

Charging purchases to customer's accounts

The settlement of disputed accounts

The return of merchandise

Many of the tax reports

Many mistakes are made in the prepartion of sales slips. Some of the common mistakes are:

Ticket is so poorly written it cannot be read

Discounts are not shown on the ticket

Mistakes in addition, subtraction, and multiplication

All sales are not accounted for

Customer's names and addresses are not correct

Customer's signature is not obtained on a charge slip

Sales tax is not figured

Steps in properly completing a sales slip are provided in INFO-3.

It is important to a business that the sales in the various departments be kept separate. In doing so, the managers can determine if each department is making a profit.

Credit extended to a customer by a business is associated with the business's accounts receivable. As charge sales are made, these amounts are added to the account record of the customer. These amounts are not paid by the customer at the time of the purchase but will be paid later which makes it "receivable" to the business.

Advantages of horticultural business selling on credit include:

Selling on credit increases sales. Cash is not required at the time of the sale.

Selling on credit is a means of meeting business competition.

New customers are often served through credit arrangement.

Credit service holds good customers.

Credit is often considered a "good will" bufffer.

Disadvantages of a horticultural business selling on credit include:

It costs the business money to offer credit service.

It is expected that there will be some losses from a credit business.

The owner of the business may get someone else's poor credit risks.

Money tied up in "accounts receivable" limits the operating capital of the company.

The dealer may have to borrow money at the bank for operating if too much of the money is tied up in accounts receivable.

Customers may over-extend themselves if it is too easy for them to buy.

Disagreements may arise over charge accounts and customers may be lost because of misunderstandings.

Long past-due amounts may have to be taken to court for collection which requires time and money from the company.

Purchase orders are discussed in INFO-9

The Iowa sales tax is imposed upon the gross receipts from all sales of tangible personal property and certain taxable services sold in the state to a consumer or user, unless the sale meets a specific exemption described by statute.

The Iowa use tax is complementary to the Iowa sales tax and imposed on the use of tangible personal property in Iowa which is purchased out-of-state with the intent to use the property in Iowa.

The Iowa sales tax is imposed upon the retailer's gross receipts. Gross receipts do not include discounts allowed and taken if the sales tax associated with the discount was not collected from the buyer. Gross receipts do not include the sale price of property returned by customers for which the retail sales price was refunded in cash or by credit.

The tax or use schedule used in Iowa is presented in ACT-16.

Determining the daily cash balance is done daily by 99 percent of all retail businesses. It is important in checking the cash flow in and out of the business. If the amount of cash in the register does not check with the amount on the cash tickets, some checking must be done. It is better to do this each day as a mistake is easier to find that day than it will be a week later.

There is a formula to follow in checking the daily cash balance. It is:

Cash and checks on hand at the beginning of the day
PLUS
All cash and checks taken during the day (including payments on account)
MINUS
Any money taken out during the day (includes cash-out payments during the day and bank deposits)
EQUALS
New cash balance.

Discounts are offered by a horticultural business for a number of different reasons:

Quantity discounts are offered to encourage customers to buy in larger amounts. When a garden center sends out a truck to deliver fertilizer, it is more economical if it can have two or three tons rather than a small amount such as a quarter or half ton. Some of this savings in labor and handling is passed on to the customers in the form of tonnage discount.

Cash discounts are offered to encourage customers to pay for the purchases. Many managers feel that they can offer an advantage to the customer if he can get the money right now.

Early season discounts are allowed to move goods ahead of the rush season. The manager feels that it is worth some money if he/she can spread out the peak work load season by offering seasonal discounts.

EVALUATION:

Upon completion of this lesson, the students will be able to:

Properly record sales in horticultural business.

List the advantages and disadvantages of selling on credit.

Make out a purchase order.

Compute sales tax.

Describe cash flow in a horticultural business.

Figure discounts on horticultural merchandise.

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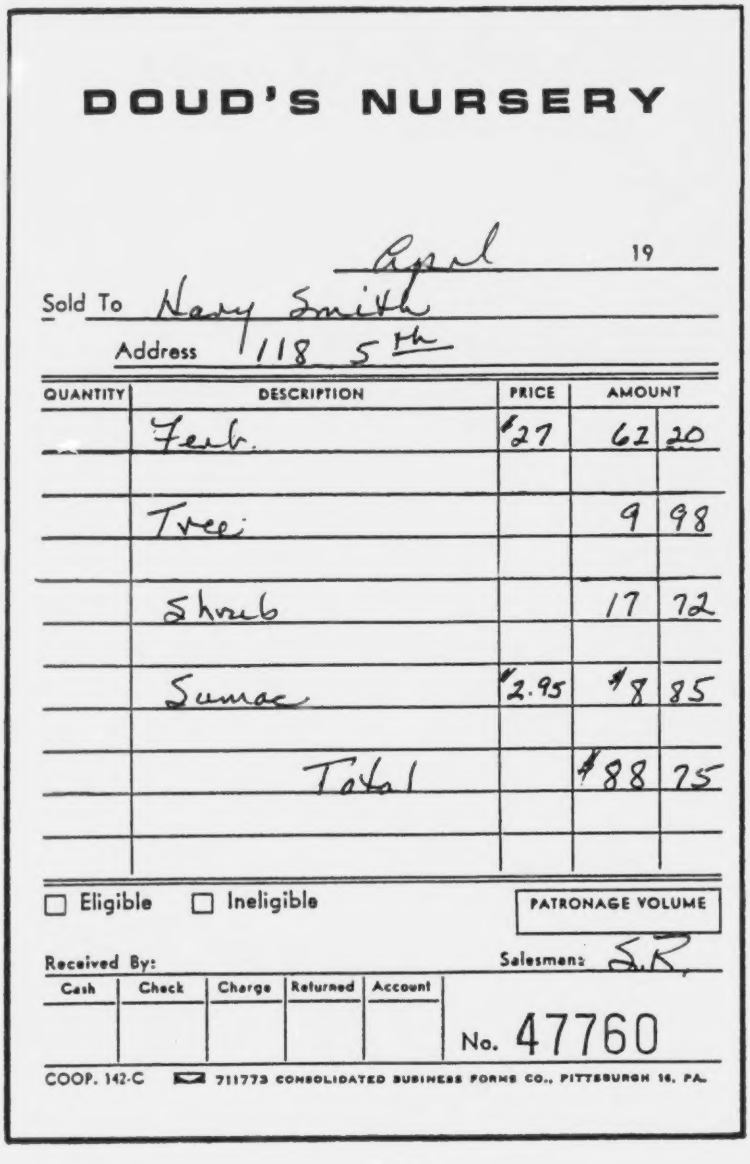
Mathematics for Horticulture. Ruth A. Peltier. Ohio Agricultural Education Curriculum Materials Service, Department of Agricultural Educaion, The Ohio State University, Columbus, Ohio.

Sales and Use Tax Information Booklet. Taxpayer Services Section, Iowa Department of Revenue and Finance, P.O. Box 10457, Des Moines, Iowa 50306

A POORLY PREPARED SALES SLIP



DOUD'S NURSERY

April 19

Sold To Hary Smith

Address 118 5th

QUANTITY	DESCRIPTION	PRICE	AMOUNT	
	Fert.	$27	62	20
	Trees		9	98
	Shrub		17	72
	Sumac	$2.95	$8	85
	Total		$88	75

☐ Eligible ☐ Ineligible

PATRONAGE VOLUME

Received By:

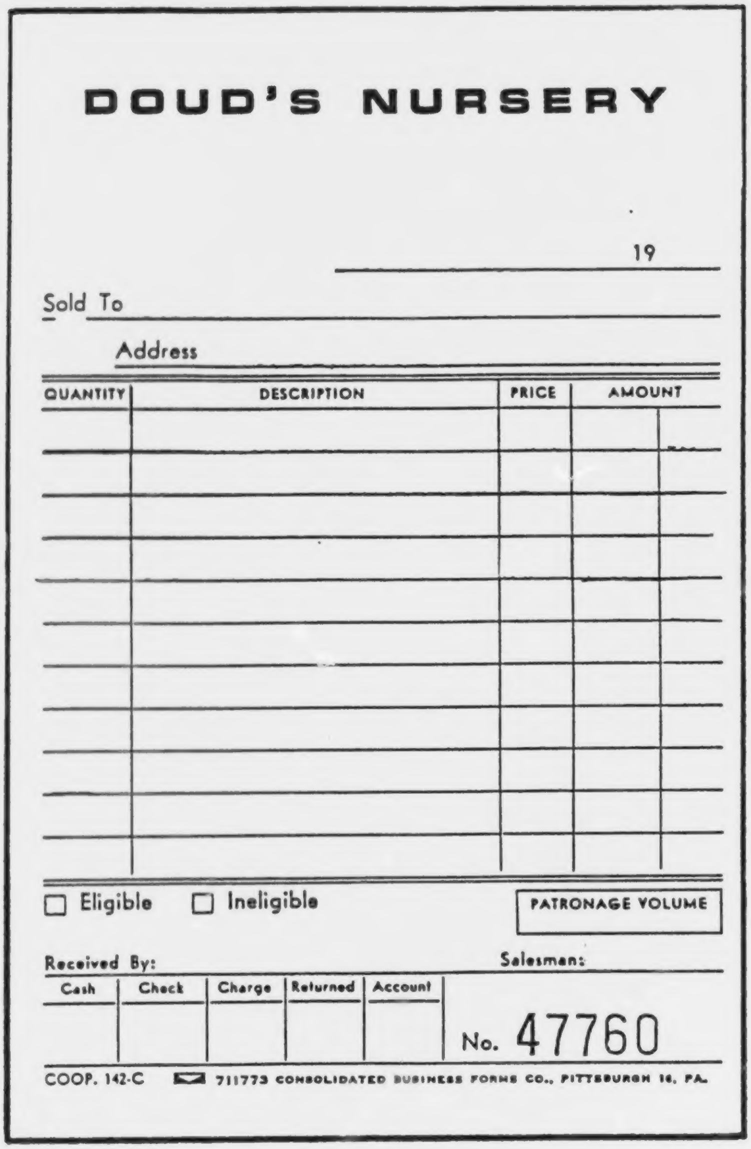
Salesman: S.R.

Cash	Check	Charge	Returned	Account

No. 47760

COOP. 142-C 711773 CONSOLIDATED BUSINESS FORMS CO., PITTSBURGH 16, PA.

PROPERLY COMPLETING A SALES SLIP



DOUD'S NURSERY

19

Sold To

Address

QUANTITY	DESCRIPTION	PRICE	AMOUNT

☐ Eligible ☐ Ineligible

PATRONAGE VOLUME

Received By: Salesman:

Cash	Check	Charge	Returned	Account

No. 47760

COOP. 142-C 711773 CONSOLIDATED BUSINESS FORMS CO., PITTSBURGH 16, PA.

Sales Tickets Record

All cash taken in during the day

The amount of merchandise sold

All customer charges

Settlement of disputed accounts

Return of merchandise

Taxes collected

Common Sales Slip Mistakes

* Poorly written sales slips
* Illegible handwriting on sales slip
* Discounts not sold
* Mistakes in addition, subtraction, and multiplication
* All sales are not accounted for
* Customer's name and address incorrect
* No customer signature on a charge slip
* Sales tax not figured

NECESSARY STEPS IN CORRECTLY WRITING OUT A SALES TICKET

1. Mark the correct date.

2. Write the customer's correct name and address. If partnership, it should be noted as such. The name and address becomes necessary if the purchase becomes a charge account.

3. Give a complete description of each article sold.

   a. Quantity and unit should be thought of as one item (i.e., 100 lbs.; 10 gal.).
   b. The description should clearly designate the type of merchandise being sold and not merely be a commodity classification. This is necessary for checking price and for inventory controls.
   c. Show the price per unit on all merchandise. (Some sales tickets will have column heading marked "price.") Bill all merchandise at the retail price. If the customer is entitled to a discount because of volume, damage, etc., this amount is then deducted from the retail price.
   d. Extensions must be mathmatically accurate and legibly written.

4. Make a sub-total of the extension.

5. Calculate the sales tax on all taxable items, if any, and enter under the first total.

6. Next, calculate any delivery charges and enter under the sales tax calculations.

7. Add the extension column to obtain the grand total charges for the sale.

8. Check the block on the ticket to indicate the method of payment, cash, check, charge, returned or account.

9. If settlement is to be made by check in an amount different from the ticket total, it is well to note the amount of the check on the face of the sales ticket with the calculation of the charge to be given. A similar calculation is recommended when a large bill is given in payment.

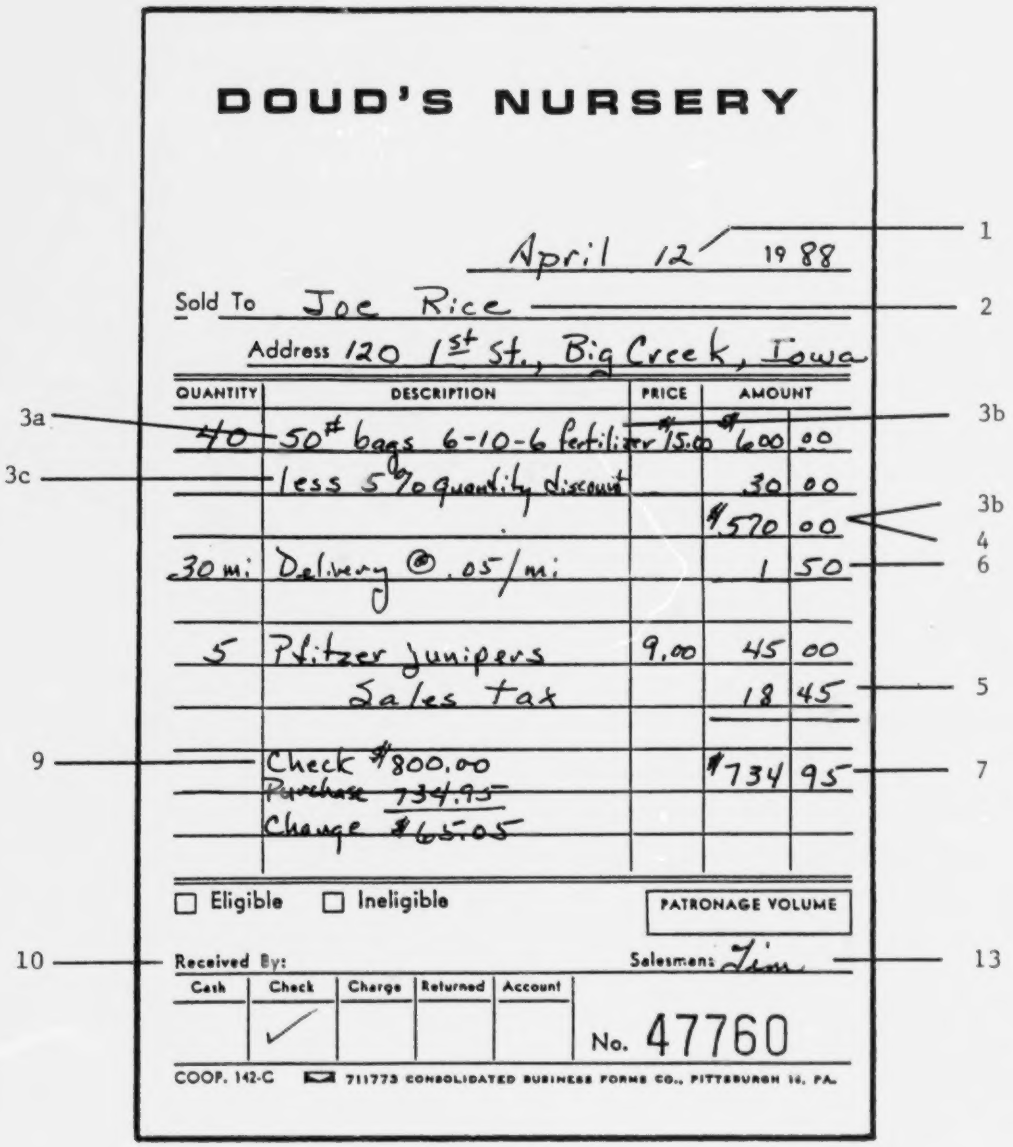
10. Get the signature of the person receiving the merchandise if the settlement is to be other than cash.

11. When a customer pays on account, make out a sales ticket and indicate what he is paying for, i.e., fertilizer, feed, balance on note, etc.

12. In all cases if an employee should ruin a ticket for any reason, the word VOID should be written across the front of the ticket and the original placed with the other tickets. Sales tickets are numbered consecutively and each one must be accounted for at the end of the day's business.

13. The salesman initials the ticket in the appropriate block.

PROPERLY PREPARED SALES SLIP


1
2
3a
3b
3c
3b
4
6
5
9
7
10
13

DOUD'S NURSERY

April 12 19 88

Sold To Joe Rice

Address 120 1st St., Big Creek, Iowa

QUANTITY	DESCRIPTION	PRICE	AMOUNT	
40	50# bags 6-10-6 fertilizer	$15.00	$600	00
	less 5% quantity discount		30	00
			$570	00
30 mi.	Delivery @ .05/mi.		1	50
5	Pfitzer junipers	9.00	45	00
	Sales tax		18	45
	Check $800.00 Purchase 734.95 Change $65.05		$734	95

☐ Eligible ☐ Ineligible

PATRONAGE VOLUME

Received By:

Salesman: Tim

Cash	Check	Charge	Returned	Account
	✓			

No. 47760

COOP. 142-C 711773 CONSOLIDATED BUSINESS FORMS CO., PITTSBURGH 16, PA.

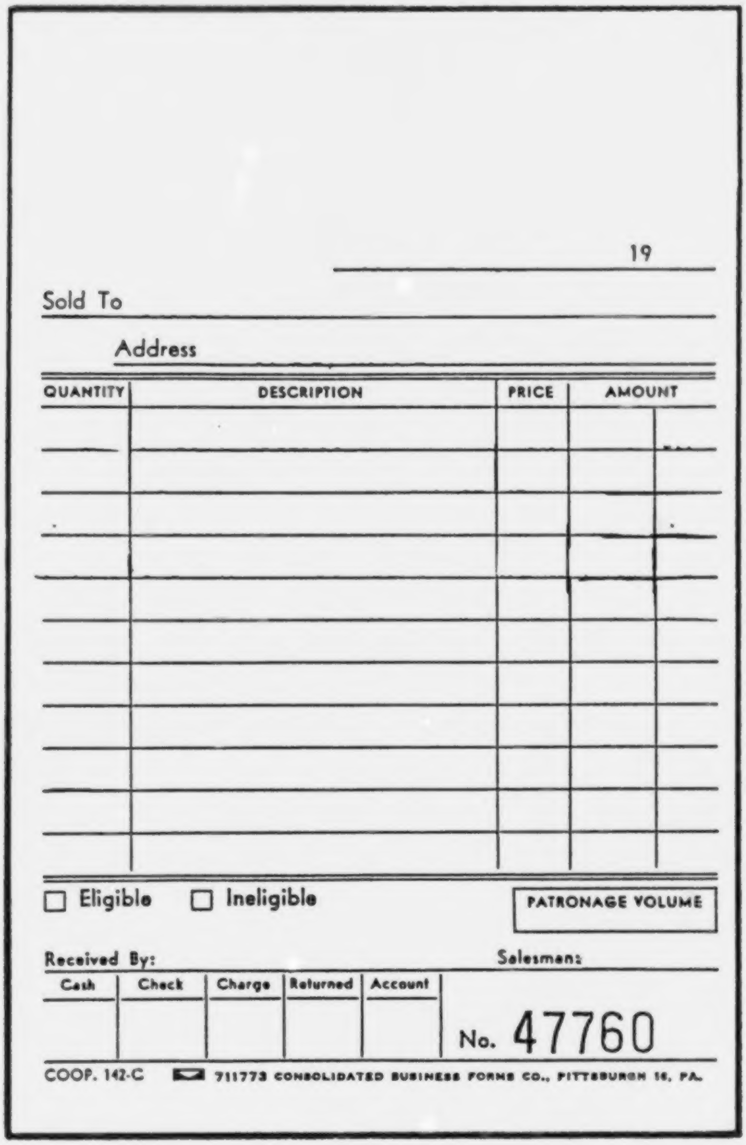
PROPERLY RECORDING SALES IN A HORTICULTURAL BUSINESS

Provided below are three sales transactions for three different horticultural businesses. Make a sales slip for each of these transactions using the sales slips provided by your instructor.

Capital City Florists
April 20, 1988
Customer: Alice Smith, 2180 Sixth Street, Des Moines, IA
Purchases: 6 red carnations @ 1.50 ea.
5 white carnations @ 1.50 ea.
6 sprigs of leatherleaf @ .20 ea.
1 crystal vase @ $17.50
2 pair ceramic bluebirds @ 7.50 pr.
Returned a small vase that had a chip. Allowed 75 percent of the purchase price of $13.
Charged these purchases

Doud's Nursery
May 1, 1988
Customer: Acme Landscape Service, Panora, IA
Purchases: 50 pin oak trees, 6 ft. tall @ 27.50 ea.
Discounted 20% because of quantity purchase
3 tons 6-10-6 fertilizer @ 256.00 ton
Discounted 10% because of quantity purchase
100 - 50 lb. bags bark chips @ $14 bag
Discounted $2 bag
40 - 50 lb. bags ground peat moss @ 17.50 bag
Paid by check. Wrote a check for $3,500

Long's Garden Center
April 30, 1988
Customer: Timothy Doud, 482 West Street, Knoxville, IA
Purchases: 3 lbs. onion sets @ 1.29 lb.
15 pkgs. garden seed @ .95 ea.
3 rose bushes @ 9.50 ea. (guaranteed)
3 - 50 lb. bags crushed rock @ $12 bag
Charged the purchases



19

Sold To

Address

QUANTITY	DESCRIPTION	PRICE	AMOUNT

☐ Eligible ☐ Ineligible

PATRONAGE VOLUME

Received By:

Salesman:

Cash	Check	Charge	Returned	Account

No. 47760

COOP. 142-C 711773 CONSOLIDATED BUSINESS FORMS CO., PITTSBURGH 16, PA.

RECORDING DAILY SALES

The following sales were made in the Green Gables Garden Center. Enter the sales figures in the appropriate daily sales column.

Date	Item	Cost	Selling Price
04/01/88	Grass seed (10 lb.)	$ 7.90	$ 18.00
	Seed potatoes (120 sets)		14.75
	Onion sets (10 bunches)		23.50
	Bedding plants (vegetable)		12.90
	Seed (packages)		8.00
	Dwarf pear trees (2 trees)		21.95
	Cherry Trees (2 trees)		18.89
	Green ash trees (4 trees)		17.00
	Purple ash tree		15.75
	Redbud tree (2 trees)		12.58
04/02/88	Gladiolus bulbs		4.79
	Wisteria tree		14.95
	Red-flowering dogwood tree		25.00
	Bush delphinium		3.50
	Gerbera		5.99
	Hollyhocks		4.25
	Sweet Williams		4.00
	Roses		46.75
	Dwarf burning bush		24.95
	Plum trees		43.00
	English walnut tree		8.97
	Garden soaker hose		10.45
	Crushed rock		18.00
	Sevin dust		8.49
	Money plant		5.35
	Asparagus		6.00
	Annual flowers (seed)		35.00

Continued on Act 8b

04/03/88	Ground peat moss	60.00
	Vegetable plants	38.00
	Strawberry plants	45.00
	Blueberries	48.00
	Artichokes	14.50
	Vegetable seed	35.00
	Sweet corn seed	90.00
	Fertilizer	320.00
	Bedding plants	148.00
	Hot caps	35.00
	Tomato dust	15.00
	Fruit tree spray	8.95
	Rotenone dust	6.95
	Chipped bark	40.95
	Raspberries	35.60
	Strawberries	80.00
	Apple trees	60.00
04/04/88	Mimosa tree	17.00
	Roses	25.00
	Lilacs	11.85
	Red-twig dogwood	32.00
	Clemantis	17.00
	Oriental poppies	38.00
	Black maple	29.75
	Honeysuckle	14.95
	Fertilizer	38.00
	Red leaf birch	20.75
	Red oak	72.90
	Ginko	29.60
	Bedding plants	82.60
	Bird bath	162.90
	Peach trees	30.50
	Raspberries	60.34
	Red Magnolia	8.19
	Crabgrass killer	31.50
	Garden tiller	54.95
	Peat pots	49.95
	Vegetable seed	162.30
	Elderberry bushes	18.00
	Pussy willow	80.00
	Pink-flowering almond	37.50
	Sugar maple	42.50
	Sweet gum	30.50
	Crimson king maple	46.50

TOTAL OF DEPARTMENTS MUST EQUAL TOTAL SALES

DATE	TOTAL SALES	SHRUBS	TREES	SEED/ PLANTS	CHEMICALS	FERTILIZER	PERENNIAL	BEDDING PLANTS	LAND-SCAPING MATERIALS	EQUIPMENT
Tot										

Advantages of Credit in a Horticultural Business

- Increase sales
- Assist in meeting competition
- Serves new customers
- Holds good customers
- Is a "good will" builder

Disadvantages of Credit in a Horticulture Business:

Costs the business money

People "charge" and do not pay their account

Business may pick up poor credit risks

Limits business's operating capital

Manager may have to borrow money for operating capital

Customers may over-extend themselves

Loss of business due to misunderstandings

May require court action to collect

MAKING ENTRIES ON CREDIT ACCOUNTS

Entries on credit account card:

1. The date: This is important for account records. This is the indication of how long accounts have been charged before being paid.
2. Item: Briefly describe the items that are on the sales ticket. This will help to check on customer purchases at a later date.
3. Debit: Charges are entered in the debit column.
4. Credits: Payments on account are entered in the credit column.
5. Balance: This is a running balance column. The last figure in this column is what the customer owes. Add charges to the balance column and subtract payments on account from the balance column.
6. Check: Check this column as the last line used on the account card. This is important where a statement form and carbon is used which covers the other 5 columns. This allows for making a monthly statement and a permanent record card at the same time.

HSS-3

ACT-12a

CUSTOMER ACCOUNT CARD I

SHEET NO.

NAME Alice Smith

RATING

ADDRESS 2180 6th St, Des Moines, Iowa

TERMS

REMARKS	DATE			ITEM	DEBIT		CREDIT		BALANCE			
				BALANCE FORWARD						00		✓
	2	10	88	Potted mum	14	50			14	50		✓
	2	28	88	Paid on account			14	50		00		✓
	3	10	88	Hospital Arrangement	20	—			20	—		✓
	3	26	88	Brass Bookends	35	—			55	—		✓
	4	1	88	Paid on account			30	—	25	—		✓

CUSTOMER ACCOUNT CARD II

SHEET NO.

NAME Timothy Douds

RATING

ADDRESS 482 West St., Knoxville, Iowa

TERMS

REMARKS	DATE			ITEM	DEBIT		CREDIT		BALANCE			
				BALANCE FORWARD					00	00		✓
	2	10	88	Fruit tree spray	8	60			8	60		✓
	2	20	88	One gallon sprayer	43	50			52	10		✓
	3	20	88	Seed Potatoes, Onion sets	14	90			67	00		✓
	4	1	88	Paid on account	50	—			17	00		✓

CUSTOMER ACCOUNT CARD III

SHEET NO. ____________

NAME ____________ RATING ____________

ADDRESS ____________ TERMS ____________

REMARKS	DATE	ITEM	DEBIT	CREDIT	BALANCE	
		BALANCE FORWARD				

PURCHASE ORDERS

Purchase orders are a tool of understanding. This is one of the forms that a clerk will need to become familiar with. Some companies, however, do no use a purchase order.

The purchase order outlines in an orderly manner the terms of an order or sale. The form is actually completed by the purchaser with a copy going to the seller. When the form is signed by the owner or manager, it indicates that he understands all the terms of the purchase from the supplier.

Purchase orders are part of the inventory control system. As items appear to be nearly sold out on the inventory records, the manager may request the employee to make up a purchase order for these supplies. This can then be sent to the supply company or it would be ready for their salesman to pick up the next time he stops.

The purchase order is important in the pricing of merchandise. The price of the new order is indicated on the form. This might be higher or lower than the last shipment of this product. Thus, the manager can adjust his prices to the current market. He may want to change his prices even before the shipment has arrived.

The purchase order helps in receiving of goods. When a shipment of merchandise arrives, it can be checked against the purchase order to see if the items are correct. If the manager is not present this can be done by other employees without delay. This also helps in the unloading since plans can be made in advance for space to store the material.

Information on Purchase Orders:

Name of company to which order is being given

Name of company making purchase

Purchase order number

When merchandise is to be shipped

Date order is written

How merchandise is to be shipped and who is to pay freight

Terms of payment and date merchandise is needed

Type and quantity of merchandise ordered

Price per unit of merchandise and total cost of the order

Name of person authorizing the purchase

COMPLETING PURCHASE ORDERS

Using the following information, fill in the purchase order, ACT-15b

Use today's date.
The purchaser order number is 118.
The material is being ordered from the:
Kansas City Wholesale Florists
1823 North 15th
Kansas City, Missouri 82118
The company making the purchase is the:
ABC Florist
1282 Walnut Street
Smithville, Iowa 63811
The shipment will be made by UPS truck.
The freight will be paid by the purchaser. (This means that the ABC Florist will pay the freight from Kansas City and will be entered in the space for F.O.B.)
The merchandise is to be paid for by the 10th of the next month.
It is needed in three weeks from today's date.

Following is a list of materials ordered:

100	red carnations @ $38/100
100	pink carnations @ $38/100
100	white carnations @ $38/100
20	boxes floral tape @ $6/box
12	rolls of #9 ribbon (equal amounts red, green and white) @ $5.17/roll
10	bunches of miniature carnations @ $3/bunch
2	boxes of #26 floral wire @ $25/box
10	bunches of blue statice @ $3/bunch
4	boxes of corsage pins @ $1.75/box
30	bunches of assorted pompoms @ $2.25/bunch
20	rolls davey tape @ $4/roll
1	drum of floral life @ $22.50/drum
4	boxes of oasis @ $27.50/box

PURCHASE ORDER

NO.__________

TO__________ DATE__________19____

ADDRESS__________

SHIP TO__________

ADDRESS__________

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT
OUR ORDER NUMBER MUST APPEAR ON INVOICES, PACKAGES AND CORRESPONDENCE
ACKNOWLEDGE IF UNABLE TO DELIVER BY DATE REQUIRED.

Buyer__________

FORM 44-110 DUP. U.S.A.
44-111 TRIP.

ORIGINAL

DETERMINING SALES TAX

For each of the sales transactions in ACT-7a, compute the sales tax and add the taxes to the sales slips. Use ACT-16b to determine the tax.

	Total Sales	Sales Tax	Total
Alice Smith			
Acme Landscape Service			
Timothy Doud (Knoxville, Iowa has 1% local option tax)			

Figure the tax on the following purchase made at the Earl May Garden Center in Ames, Iowa. Ames has a 1 percent local option tax.

> Jim Foster bought a bottle of Otho liquid evergreen tree fertilizer. The cost of the purchase was $3.60. How much tax should be added to the amount of this purchase?

IOWA SALES TAX INFORMATION

TAX BRACKETS

The following sales or use tax schedule has been approved by the Department to be used in lieu of a straight four percent (4%) calculation of sales or use tax.

$0.00 - $0.12 × $0.00	$2.88 - $3.12 × $0.12
0.13 - 0.37 × 0.01	3.13 - 3.37 × 0.13
0.38 - 0.62 × 0.02	3.38 - 3.62 × 0.14
0.63 - 0.87 × 0.03	3.63 - 3.87 × 0.15
0.88 - 1.12 × 0.04	3.88 - 4.12 × 0.16
1.13 - 1.37 × 0.05	4.13 - 4.37 × 0.17
1.38 - 1.62 × 0.06	4.38 - 4.62 × 0.18
1.63 - 1.87 × 0.07	4.63 - 4.87 × 0.19
1.88 - 2.12 × 0.08	4.88 - 5.12 × 0.20
2.13 - 2.37 × 0.09	5.13 - 5.37 × 0.21
2.38 - 2.62 × 0.10	5.38 - 5.62 × 0.22
2.63 - 2.87 × 0.11	5.63 - 5.87 × 0.23

For sales larger than $5.87 tax is computed at a straight four percent. One-half cent or more is treated as one cent.

The tax brackets below can be used if a 1% local option tax is also imposed:

$0.00 - $0.09 × $0.00	$2.90 - $3.09 × $0.15
0.10 - 0.29 × 0.01	3.10 - 3.29 × 0.16
0.30 - 0.49 × 0.02	3.30 - 3.49 × 0.17
0.50 - 0.69 × 0.03	3.50 - 3.69 × 0.18
0.70 - 0.89 × 0.04	3.70 - 3.89 × 0.19
0.90 - 1.09 × 0.05	3.90 - 4.09 × 0.20
1.10 - 1.29 × 0.06	4.10 - 4.29 × 0.21
1.30 - 1.49 × 0.07	4.30 - 4.49 × 0.22
1.50 - 1.69 × 0.08	4.50 - 4.69 × 0.23
1.70 - 1.89 × 0.09	4.70 - 4.89 × 0.24
1.90 - 2.09 × 0.10	4.90 - 5.09 × 0.25
2.10 - 2.29 × 0.11	5.10 - 5.29 × 0.26
2.30 - 2.49 × 0.12	5.30 - 5.49 × 0.27
2.50 - 2.69 × 0.13	5.50 - 5.69 × 0.28
2.70 - 2.89 × 0.14	5.70 - 5.89 × 0.29

Daily Cash Balance

Cash and checks on hand at beginning of day

Plus

All cash and checks taken in during the day

Minus

Any money taken out during the day

Equals

New Cash Balance

DETERMINING CASH FLOW

You are to determine the cash flow for the Boehm Greenhouse, Inc. for the three-day period of time indicated below. For each day, determine the cash flow, complete the cash flow form, and fill out a bank deposit form.

Boehm Greenhouse, Inc.
Kansas City, Missouri

May 21, 1988

Cash on hand			$582.60
Cash slips:	$ 22.80		
	16.90		
	4.50		
	52.80		
	92.16		
Checks received on account:	$468.21		
	380.90		
	114.60		
Cash taken in during the day	_______		
		Sub Total	$______
Cash out:			
Freight charges	$ 23.80		
Bank deposit	1253.10		
Cash out during the day	$________		$______
		New Cash Balance	$______

May 22, 1988

Cash on hand			$______
Cash slips:	$ 8.25		
	16.82		
	185.91		
	32.63		
	55.91		
	322.65		
Checks received on account:	$381.90		
	65.34		
	92.40		
	246.93		
Cash taken in during the day	_______		$______
		Sub Total	$______
Cash out:			
Freight charges	$ 46.80		
Contributions	15.00		
Refunds	18.00		
Bank deposit	1352.21		
Cash out during the day	$________		$______
		New Cash Balance	$______

May 23, 1988

Cash on hand			$______
Cash slips:	$ 4.25		
	19.63		
	163.90		
	91.90		
	322.66		
	201.17		
Checks received on account:	$132.60		
	58.90		
	173.61		
	346.27		
Cash taken in during the day	______		$______
		Sub Total	$______
Cash out:			
Freight charges	$ 18.42		
Refunds	24.63		
Bank deposit	1583.25		
Cash out during the day	$______		$______
		New Cash Balance	$______

DAILY CASH SLIPS

Date ______

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Date ______

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ______

Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Date ______

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ______

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance------------- ______

Date ______

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ______

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------- ______

Date ______

Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

BANK DEPOSIT SLIPS

DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY______________________________

________________________ 19______

IN RECEIVING ITEMS FOR DEPOSIT OR COLLECTION THIS BANK ACTS ONLY AS DEPOSITOR'S COLLECTION AGENT AND ASSUMES NO RESPONSIBILITY BEYOND THE EXERCISE OF DUE CARE. ALL ITEMS ARE CREDITED SUBJECT TO FINAL PAYMENT IN CASH OR SOLVENT CREDITS. THIS BANK WILL NOT BE LIABLE FOR DEFAULT OR NEGLIGENCE OF ITS DULY SELECTED CORRESPONDENTS NOR FOR LOSSES IN TRANSIT, AND EACH CORRESPONDENT SO SELECTED SHALL NOT BE LIABLE EXCEPT FOR ITS OWN NEGLIGENCE. THIS BANK OR ITS CORRESPONDENTS MAY SEND ITEMS DIRECTLY OR INDIRECTLY, TO ANY BANK INCLUDING THE PAYOR, AND ACCEPT ITS DRAFT OR CREDIT AS CONDITIONAL PAYMENT IN LIEU OF CASH; IT MAY CHARGE BACK ANY ITEM AT ANY TIME BEFORE FINAL PAYMENT, WHETHER RETURNED OR NOT. ALSO ANY ITEM DRAWN ON THIS BANK NOT GOOD AT CLOSE OF BUSINESS ON DAY DEPOSITED.

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY______________________________

________________________ 19______

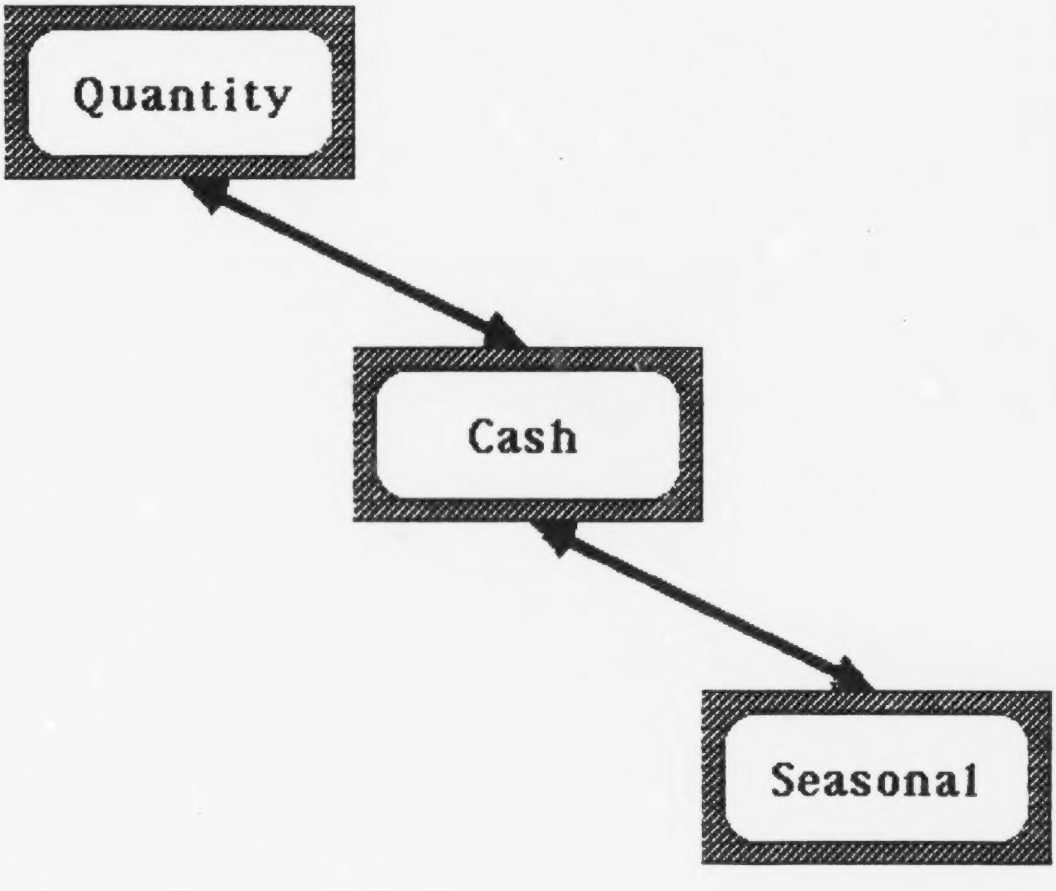
IN RECEIVING ITEMS FOR DEPOSIT OR COLLECTION THIS BANK ACTS ONLY AS DEPOSITOR'S COLLECTION AGENT AND ASSUMES NO RESPONSIBILITY BEYOND THE EXERCISE OF DUE CARE. ALL ITEMS ARE CREDITED SUBJECT TO FINAL PAYMENT IN CASH OR SOLVENT CREDITS. THIS BANK WILL NOT BE LIABLE FOR DEFAULT OR NEGLIGENCE OF ITS DULY SELECTED CORRESPONDENTS NOR FOR LOSSES IN TRANSIT, AND EACH CORRESPONDENT SO SELECTED SHALL NOT BE LIABLE EXCEPT FOR ITS OWN NEGLIGENCE. THIS BANK OR ITS CORRESPONDENTS MAY SEND ITEMS DIRECTLY OR INDIRECTLY, TO ANY BANK INCLUDING THE PAYOR, AND ACCEPT ITS DRAFT OR CREDIT AS CONDITIONAL PAYMENT IN LIEU OF CASH; IT MAY CHARGE BACK ANY ITEM AT ANY TIME BEFORE FINAL PAYMENT, WHETHER RETURNED OR NOT. ALSO ANY ITEM DRAWN ON THIS BANK NOT GOOD AT CLOSE OF BUSINESS ON DAY DEPOSITED.

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

BEST COPY AVAILABLE

Types of Discounts


Quantity
Cash
Seasonal

FIGURING DISCOUNTS

Figure the discounts on the following purchases:

1. Figure a $2 per ton discount on the following:

80 50 lb. bags of fertilizer @ $84 per ton $__________
3 tons crushed rock @ $54 per ton __________

Total $__________

Less tonnage discount __________

Amount to pay $__________

2. Figure a 2% cash discount on the following:

10 lbs lawn seed @ $1.10 per lb. $__________
12 50 lb. bags chipped bark at $8.75/bag __________
20 50 lb. bags ground peat @ $17.50/bag __________

Total $__________

Less 2% cash discount __________

Amount to pay $__________

3. Figure a 5% cash discount on the following:

15 flats bedding plants @ $16/flat $__________
20 spirea bushes at $7.50/ea. __________
30 Pfitzer Junipers @ $17.50/ea. __________

Total $__________

Less 5% discount __________

Amount to pay $__________

PROBLEM AREA 4

HOW DOES A MANAGER OF A FLORIST SHOP, GREENHOUSE OPERATION, GARDEN CENTER, OR NURSERY FINANCE HIS/HER BUSINESS?

Page

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PROBLEM 4: How does a manager of a florist shop, greenhouse operation, garden center, or nursery finance his/her business?

INTEREST APPROACH:

The White Nursery has received a shipment of Pin Oaks that will be sold during the spring selling season. There are 200 bare-root trees four foot tall in the shipment. Mr. White, the manager, has asked you to prepare the trees for sale and price them. Take class to a local nursery to determine how to prepare the trees for sale and set their selling price. Discuss the process observed and list steps in preparing and pricing the trees using ACT-1.

STUDY QUESTIONS:

1. What are the major expense items in a florist shop, nursery, and greenhouse operation?
2. How do the major expenses of the business affect business profits?
3. How does a horticultural business generate business profit?
4. What must a manager of a horticultural business consider when buying merchandise?
5. Why is stock turnover important to a horticultural business?
6. Why is inventory important to a horticultural business and how is it maintained?
7. How are florist, garden center, greenhouse, and nursery products priced?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Exploring careers in horticultural businesses. Interest Approach.

Use human relation and communication skills. Student Learning Activity #3.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Using ratios. Student Learning Activity #6.

Using average in interpreting and solving problems. Student Learning Activity #2.

Improving students' ability to correctly spell words. Student Learning Activity #3.

THINKING SKILLS:

Many student thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguish between veriable facts and value claims. Student Learning Activity #4.

Distinguish between irrelevant and relevant information. Interest Approach.

STUDENT LEARNING ACTIVITIES:

1. Have students read the references cited about horticultural business income and expenses. Using ACT-2, have students list the expenses that these businesses incur. Using TM-3, review and discuss student activity sheets.

2. Using ACT-4 and-5 and INFO-6 and 7, have students determine the expenses and profits of a garden center and nursery operation. Using TM-8 and 9, review and discuss the students' results.

3. Divide students into four groups. Assign each group to one of the following: a florist shop, garden center, greenhouse operation, and nursery. Have students visit each business and list those products sold in that business.

4. Review and discuss TM-10. Using the lists the students generated in Student Learning Activity 3, have students classify each item as to whether the item on the list is: perishable, non-perishable, expendible, an equipment or fixture.

5. Review and discuss TM-11 and 12. Using ACT-13, have students determine the turnover rate of the three business examples cited. Discuss the implications.

6. Have students read the references about inventory in a horticultural business. Review and discuss TM-14, 15, and 16. Have students complete ACT-17 using inventory information to determine turnover rate. Using information provided in INFO-18a, have students post the inventory in ACT-18b. Have students post sales (ACT-19a) to the perpetual inventory (ACT-29b).

7. Using ACT-20a and 20b, figure the selling price of roses, pfitzer junipers, and potted mums using indicated markup. Review and discuss students' work.

CONCLUSION:

The main expense items in a horticultural business are:

Cost of merchandise.

Labor.

Overhead:

Rent, utilities, advertising, office expense, delivery, telephone, taxes, and depreciation.

Expense items must be less than 100 percent of profits. If they are more than the profits, the business is operating in the red and will not exist long.

Profit is generated in a horticultural business through the sale of merchandise. Merchandise traditionally sold in a horticultural business centers on a main product and all products associated with the main product. The main product for a florist is flowers; for a nursery, trees and shrubs; a greenhouse, potted and cut flowers and greenery; and a garden center, products and seeds needed to produce a garden.

When buying merchandise for a horticultural business, the buyer must consider purchasing:

Perishable merchandise for resale.

Non-perishable merchandise for resale.

Expendable supplies for use with perishables.

Equipment and fixtures.

When buying perishable items, one should:

Stay with one reliable salesperson.

Visit wholesale flower markets and greenhouses.

Buy ahead.

Keep accurate records of purchases and sales in each area of the business.

Wait for the best buy--the larger the order, the better the price should be.

Buy only what can be used and/or sold.

Make an offer below the selling price of the merchandise.

The wholesaler knows how low he can go but may not offer this information.

When purchasing non-perishable items, buy wisely and well:

Plan ahead to determine needs.

Select merchandise for its sales appeal.

Buy some merchandise in depth and other merchandise in lesser quantities.

Buy enough to make an attractive item display.

Purchase items on a definite schedule.

Make prompt payment to take advantage of cash discount.

When purchasing expendable supplies:

Buy in large quantities to receive better prices.

Make prompt payment to take advantage of cash discount.

When deciding to make a purchase, one must decide:

What to buy.

When to buy.

When to receive.

Where to buy.

How to deliver.

How to pay.

What to pay.

Increasing the rate of stock turnover in a business is one of the keys to higher business profits.

Steps in determining stock turnover rate:

Determine dollar value of the average inventory for a year.

Divide the average inventory into the cost of goods sold.

Pricing is determined by supply and demand. When the supply is greater than the demand, the price will decrease. Conversely, when the demand is greater than the supply, the price will increase.

Most retail prices are figured on the cost of merchandise while profits are figured on sales.

Most horticultural businesses "markup" the price they pay for merchandise when determing what they should charge the customer for the merchandise. The rule of thumb used by many horticultural businesses ranges from a 2 to 1 to 4 to 1 markup.

Another approach to determining selling price and markup is to start with the selling price and work backward to find how much merchandise to use. Included in this approach to determine a price is:

The desired profit (10%)

Overhead (27%)

Labor (30%)

Inventory (supplies)

Cost of merchandise

An inventory is an itemized list of goods with their estimated worth. Taxes and insurance the business pays are based on the inventory. This makes it very important that inventory records be accurate.

The inventory includes all items that the business has to sell.

Inventory may be understocked. A short supply means that the merchant may lose business because of a shortage of an item on hand when a customer asks for it.

Balance of the inventory is the key to good inventory control.

Maintaining proper balance of inventory is the responsibility of everyone in the business.

Inventory records:

Determine the rate of turnover during the year.

Help determine loss due to theft, damage, and other causes.

Show investment in merchandise carried in stock.

Assist in pricing merchandise.

Assist in figuring tax reports.

Assist in determining insurance needs.

Help determine most profitable items.

Profit wise, there are three types of merchandise carried in a horticultural business:

Items that make a profit.

Items of low profit but which must be carried as a service to customers and that encourage customers to come into the business.

Items that actually lose money but may be carried or offered to meet competition.

The best way of actually knowing how many units of any item is on hand is to take an actual count. It may be done monthly, quarterly, semi-annually, or annually.

After an inventory had been taken, the information collected is transferred to inventory forms which indicate:

The amount of the item on hand.

The cost per unit of each item.

The total value of each item on hand.

The perpetual inventory is a record which is adjusted daily for sales of all items and purchases of items as they are received by the business.

When the markup doesn't provide the business with a profit, it may be due to any of the following:

Setting prices too low.

Not buying properly.

Throwing in too much merchandise.

Not co-ordinating buying and selling.

Dumping too much merchandise.

Failing to ring up all sales.

Taking merchandise without recording purchase.

Running too high on overhead.

EVALUATION:

Upon completion of this lesson, the students will be able to:

List the major expenses in florist shops, nursery, and greenhouse operations.

Describe how major expenses affect business profits.

List methods used by horticultural businesses to generate business profits.

List factors to consider when buying horticultural merchandise.

Describe and demonstrate how stock turnover works and how it affects the horticultural business.

Describe and maintain an inventory.

Price horticultural merchandise.

REFERENCES:

The Retail Florist Business. Pfahl, Peter B. The Interstate Printers and Publishers, Inc., Danville, IL.

Nursery Management Handbook. Furuta, T. Agricultural Extension Service, University of California, Riverside, California.

Business Procedures and Records. Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

STEPS IN PREPARING AND PRICING NURSERY STOCK FOR SALE

Step 1.

Step 2.

Step 3.

Step 4.

Step 5.

Step 6.

Step 7.

Step 8.

Steps in Preparing and Pricing Nursery Stock for Sale Cont'd.

Step 9.

Step 10.

Step 11.

Step 12.

Step 13.

Step 14.

Step 15.

Step 16.

Step 17.

Steps in Preparing and Pricing Nursery Stock for Sale Cont'd.

Step 18.

Step 19.

Step 20.

EXPENSES OF HORTICULTURAL BUSINESS

Nursery Business

____

____

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Florist Shop

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Greenhouse Produce

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____

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Garden Center

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Major Expense Items of a Horticultural Business

- * Cost of Merchandise
- * Labor
- * Overhead:

rent, utilities, advertising,
office expense, delivery,
telephone, taxes, depreciation

PROBLEM: The Country Garden Center had a total dollar volume of business for the previous year of $455,000. Using INFO-6, compute the operating expenses of the business for that year.

Salaries and wages ____________

Occupancy

Rent ____________

Utilities ____________

Selling:

Advertising and promotion ____________

Travel and entertainment ____________

Commission ____________

Clearing house charges ____________

Delivery ____________

Operating Expenses ____________

Total Operating Expenses ____________

PROBLEM: The Floral Gardens Florist Shop had total volume of business for the previous year of $187,500. Using INFO-7, compute the gross profit for the business for the previous year.

Sales ______________

Cost of merchandise ______________

Gross profit ______________

PROBLEM: "Flowers by Gerald" had a total volume of business of $265,000 for the past year. The cost of merchandise for that year was $195,000. What was the gross profit and was it adequate to sustain his business?

Sales ______________

Cost of merchandise ______________

Gross profit ______________

Operating Expenses by Ownerships
Grouped as to Annual Dollar Volume

M=$1,000	Under $75M	$75M-$149M	$150M-$249M	$250M-349M	$350M-$499M	$500M-$749M	Over $750M
	As a Per Cent of Total Sales and Other Income						
1. SALARIES AND WAGES							
Employees	18.4	18.8	22.2	20.27	25.2	19.6	20.9
2. OCCUPANCY							
Rent	3.6	3.1	3.42	3.37	1.83	1.8	2.5
Utilities (Telephone)	2.46	2.3	2.42	2.48	1.71	1.81	1.7
OCCUPANCY TOTALS	6.06	5.4	5.84	5.85	3.54	3.61	4.12
3. SELLING (other than wages)							
Advertising and promotion	1.01	1.4	2.4	2.41	2.0	3.8	4.0
Travel and entertainment	0.39	0.71	0.50	0.62	0.81	0.62	0.61
Commission--FTD "Incoming"	2.42	2.61	1.80	2.24	2.3	1.91	1.87
Clearing house charges	0.81	0.79	0.50	0.44	0.37	0.29	0.22
4. DELIVERY							
(Delivery--(other than wages)	7.1	6.2	6.2	5.1	4.8	4.20	3.42
5. OPERATING EXPENSES							
(Overhead)	9.7	8.99	9.41	9.02	8.15	7.67	7.99
TOTALS	45.89	44.9	48.85	45.95	47.17	41.7	43.21

Profit and Expense Summary of
Limited Number of FTD Shops

M=$1,000	Under $75M	$75M-149M	$150M-$249M	$250M-$349M	$350M-$499M	$500M-$749M	Over $750M
1. NET SALES	100%	100%	100%	100%	100%	100%	100%
2. COST OF MERCHANDISE	52.2	46.7	43.2	43.0	39.4	39.4	37.2
3. GROSS PROFIT Includes other income	47.8	53.3	56.8	57.0	60.6	60.6	62.8

County Garden Center
Operating Expenses:

Salaries & Wages	$114,660.00
Occupancy	
Rent	8,326.50
Utilities	7,780.50
Selling	
Advertising & Promotion	9,100.00
Travel & Entertainment	3,865.50
Commission	10,465.00
Clearing House Charges	1,683.50
Delivery	19,110.00
Operating Expenses(overhead)	34,998.50

Total Operating Expenses:

$209,809.50

Revenue and Expense Summary of "Floral Gardens Florist Shop"

Sales	$187,500
Cost of Merchandise	81,000
Gross Income	$106,500

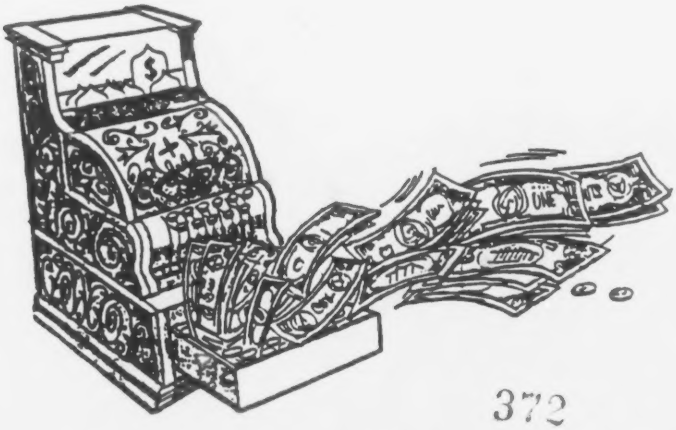
Gross Profit for "Flowers by Gerald"

$265,000 - Sales
- 195,000- Cost of Merchandise
$ 70,000 - Gross Profit

Percent merchandise cost
of sales = 74.4%

When buying merchandise for a horticulture business, the buyer must consider purchasing:

- * Perishable merchandise for resale.
- * Non-perishable merchandise for resale.
- * Expendable supplies for use with perishables.
- * Equipment and fixtures.



When deciding to make a purchase, a buyer must decide:

1. What to buy
2. When to buy
3. Where to buy
4. What to pay
5. How to pay
6. When to recieve
7. How to deliver

STEPS IN DETERMINING STOCK TURNOVER RATE

1. Determine dollar volume of the average inventory for a year.

2. Divide the average inventory into the cost of goods sold.

PROBLEM: The Guthrie Nursery had a dollar volume of average inventory for a year of $350,000. The average cost of goods sold was $98,500. What was the stock turnover rate for this nursery?

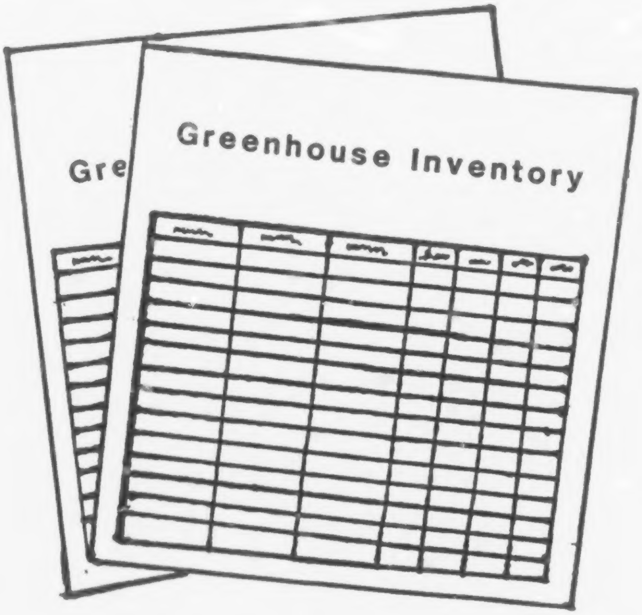
PROBLEM: The Coral Gables Greenhouse had a dollar volume of average inventory for a year of $280,000. The average cost of goods sold was $200,000. What was the stock turnover rate for this greenhouse operation?

PROBLEM: The Flower City florist shop had a dollar volume of average inventory for a year of $175,000. The average cost of goods sold was $135,000. What was the stock turnover rate for this floral operation?

Compare the above situations. Are there problems with their stock turnover rate? If so, what would you suggest to solve the problems?

INVENTORY IS

* An itemized list of goods with their estimated worth.


Gre
Greenhouse Inventory

376

Inventory Balance is Maintained by:

- Employees reporting to the manager when an item is getting low.
- Managers promptly reorder items.
- Inventory records are maintained on a regular basis.

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INVENTORY RECORDS

* Determine turnover rates

* Help determine business losses

* Shows investment in merchandise

* Assist in figuring taxes

* Assist in determining insurance needs

* Help determine most profitable merchandise

DETERMINING TURNOVER RATE

Determine the turnover rate for the following situations:

Long's Garden Center carries in stock 24 10-pound bags of rose fertilizer. During the year, the garden center sold 250 bags. What is the turnover rate of rose fertilizer?

____

The Triplett Nursery grows red-twig dogwood bushes. They maintain their growing stock at 400 bushes. During the spring and fall planting seasons for one year they sold 250 bushes. What was the turnover rate of dogwood bushes?

____

Swan's Greenhouse grew 1,500 lillies for the Easter trade. They sold 1,350. What was the turnover rate?

____

Which of the above situations had favorable turnover rates and why?

____

What problems do you see for the other turnover situations?

END OF MONTH INVENTORY

At the beginning of September, The Tabor Florist Shop had the following gift inventory items on hand:

	Quantity	Unit Price	Value
Ceramic vases - 4-inch	80	$4.00	$ 320
Ceramic vases - 6-inch	50	5.00	150
Brass candlesticks - 12-inch	30 pr.	12.00	360
Silk flowers	90 bundles	9.50/bndl.	855
Candles - 12-inch	100	7.50	750
Candles - 6-inch	50	5.00	250
Candles - tapered	16 boxes	25.00/box	400
Copper planters - 8-inch	20	12.50	250
Peweter plates	15	35.00	520
Driftwood	200 pieces	4.00	800
Crystal vases - 6-inch	30	38.00	1,140
Crystal vases - 8-inch	20	45.00	900

On the above items, the shop sold the following items:

Ceramic vases - 4-inch	35
Ceramic vases - 6-inch	14
Brass candlesticks	22 pair
Silk flowers	35 bundles
Candles - 12-inch	43
Candles - 6-inch	24
Candles - tapered	3 boxes
Pewter plates	1
Crystal vases - 8-inch	1

Using the inventory form provided you, post the End of Month Inventory for the month of September.

TABOR FLORIST SHOP END OF MONTH INVENTORY

Inventory for month ending ______________________________ 19____

Actual Number of Units Available			Description of Items	Unit	No. of Units	Unit Price		Amount	

DAILY SALES OF THE SMITH NURSERY

The following items were sold by the Smith Nursery on each of the following days:

		Number on Hand June 2, 1988
June 3, 1988		
3	Flowering almond bushes	15
48	Gladiola bulbs	300
2	Red oak trees	40
20 pk.	Concord grapes	40
30	Pfitzer junipers	150
40	50-lb. bags garden fertilizer	75
June 4, 1988		
14	Yews	30
60	Gladiola bulbs	
3	Black maple trees	42
4	Black walnut trees	36
2	River birch trees	22
12	Dahlia bulbs	80
7 qt.	Liquid fertilizer	50
3	Red oak trees	
June 5, 1988		
5	Yews	
10	Gladiola bulbs	
7	Black maple trees	
1	Black walnut tree	
1	River birch tree	
11	Pfitzer junipers	
7	Flowering almond bushes	
4	Spirea bushes	50
10	50-lb. bags of garden fertilizer	
4	4-lb. bags of tomato fertilizer	40

Using the form entitled "Smith Nursery Perpetual Inventory," set up a perpetual inventory and enter the sales of the above items on this inventory.

ACT-19b

SMITH NURSERY PERPETUAL NURSERY

Month ______________________

	BEGINNING OF THE MONTH BALANCE														
date	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
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18															
19															
20															
21															
22															

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HSS-4

SMITH NURSERY PERPETUAL NURSERY

Month ____________________

	BEGINNING OF THE MONTH BALANCE														
date															
	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.
1															
2															
3															
4															
5															
6															
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17															
18															
19															
20															
21															
22															

ACT-19b

SMITH NURSERY PERPETUAL NURSERY

Month____________________________

	BEGINNING OF THE MONTH BALANCE														
date															
	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.
1															
2															
3															
4															
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HSS-4

FIGURING THE SELLING PRICE OF HORTICULTURAL PRODUCTS

1. The Floral City florist shop has ordered 150 dozen long-stemmed red roses for sale on Valentines Day. The roses have arrived at the shop and the manager asks you to figure the selling price of the roses by the dozen and by the rose. The florist purchased the roses from the wholesaler at $6.00 per dozen and the shop operates on a 4 to 1 markup of all plant materials sold in the shop. How much will a dozen roses and separate roses cost in this shop?

____

2. It is March 1 and the Country Nursery has purchased 500 12" potted junipers for spring sales. The junipers cost $4 each. The business operates on a 3 to 1 markup. How much will the junipers sell for to the public?

____

3. You have purchased 75 assorted potted mums for sale on Mother's Day. The cost of each mum was $3. The florist shop you are working for operates on a 3.5 to 1 markup. How much will the public pay for each mum?

____

RETAILERS' MARKUP CHART

You Pay Per Flower	100% Markup	150% Markup	200% Markup	250% Markup	300% Markup	350% Markup	400% Markup
0.02	0.48	0.60	0.72	0.84	0.96	1.08	1.20
0.03	0.72	0.90	1.08	1.26	1.44	1.62	1.80
0.04	0.96	1.20	1.50	1.80	2.10	2.40	2.70
0.05	1.20	1.50	1.80	2.10	2.40	2.70	3.00
0.06	1.44	1.80	2.16	2.52	2.88	3.24	3.60
0.07	1.68	2.10	2.52	2.94	3.36	3.78	4.20
0.08	1.92	2.40	2.88	3.36	3.84	4.32	4.80
0.0	2.16	2.70	3.64	3.78	4.32	4.86	5.40
0.10	2.40	3.00	3.60	4.20	4.80	5.40	6.00
0.11	2.64	3.30	3.96	4.62	5.28	5.94	6.60
0.12	2.88	3.60	4.32	5.04	5.76	6.48	7.20
0.13	3.12	3.90	4.68	5.46	6.24	7.02	7.80
0.14	3.36	4.20	5.04	5.88	6.72	7.56	8.40
0.15	3.60	4.50	5.40	6.30	7.20	8.10	9.00
0.16	3.84	4.80	5.76	6.72	7.68	8.64	9.60
0.17	4.08	5.10	6.12	7.14	8.16	9.18	10.20
0.18	4.32	5.40	6.48	7.56	8.64	9.72	10.80
0.19	4.56	5.70	6.84	7.98	9.12	10.26	11.40
0.20	4.80	6.00	7.20	8.40	9.60	10.80	12.00
0.21	5.04	6.30	7.56	8.82	10.08	11.34	12.60
0.22	5.28	6.60	7.92	9.24	10.56	11.88	13.20
0.23	5.52	6.90	8.28	9.66	11.04	12.42	13.80
0.24	5.76	7.20	8.64	10.08	11.52	12.96	14.40
0.25	6.00	7.50	9.00	10.50	12.00	13.50	15.00
0.26	6.24	7.80	9.36	10.92	12.48	14.04	15.60
0.27	6.48	8.10	9.72	11.34	12.96	14.58	16.20
0.28	6.72	8.40	10.08	11.76	13.44	15.12	16.80
0.29	6.96	8.70	10.44	12.18	13.92	15.66	17.40
0.30	7.20	9.00	10.80	12.60	14.40	16.20	18.00

You Pay Per Bunch or Plant	100% Markup	150% Markup	200% Markup	250% Markup	300% Markup	350% Markup	400% Markup
0.50	1.00	1.25	1.50	1.75	2.00	2.25	2.50
0.75	1.50	1.88	2.25	2.63	3.00	3.38	3.75
1.00	2.00	2.50	3.00	3.50	4.00	4.50	5.00
1.25	2.50	3.13	3.75	4.38	5.00	5.63	6.25
1.50	3.00	3.75	4.50	5.25	6.00	6.75	7.50
1.75	3.50	4.38	5.25	6.13	7.00	7.88	8.75
2.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00
2.25	4.50	5.63	6.75	7.88	9.00	10.13	11.25
2.50	5.00	6.25	7.50	8.75	10.00	11.25	12.50
2.75	5.50	6.88	8.25	9.63	11.00	12.38	13.75
3.00	6.00	7.50	9.00	10.50	12.00	13.50	15.00
4.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00
5.00	10.00	12.50	15.00	17.50	20.00	22.50	25.00

Determine the markup you want to charge, and this chart will give you the selling price per dozen (top chart) or per bunch (bottom chart).

PROBLEM AREA 5

WHAT MUST A PERSON IN A HORTICULTURAL BUSINESS KNOW TO BE A SUCCESSFUL SALESPERSON?

Contents

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PROBLEM 5: What must a person in a horticultural business know to be a successful salesperson?

INTEREST APPROACH:

Bring to class three products commonly sold in a horticultural business. Select three students from class and assign each student one of the products. Give the students 15 minutes to prepare what they would say and/or do to sell the product assigned to them. Select three other students from the class who will serve as a customer. Let each student know what product he/she is going to buy and give them 10 minutes to develop a rationale for buying (or not buying) the product. At the end of the 15 minutes preparation period, have students role play the sale of the products. At the end of the role playing session, have students discuss the pros and cons of the sale of each product.

STUDY QUESTIONS:

1. What is salemanship and why is it important to horticultural businesses?
2. What constitutes a good salesperson?
3. What are the steps in every successful sale?
4. What fundamentals should an employee keep in mind when selling products for a horticultural business?
5. What practices should an employee follow when selling by telephone?
6. How is a sale of merchandise closed?
7. How are displays used to sell merchandise?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Development of career awareness. Student Learning Activity #1.

Utilize leadership skills. Student Learning Activity #3.

Use human relation and communication skills in a social interaction. Interest Approach.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve students' ability to take clear and concise notes. Student Learning Activity #1.

Strenghten the students' ability to explain clearly and sufficiently. Student Learning Activity #5.

THINKING SKILLS:

Many thinking skills can be enchanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Identify ambiguous or equivical claims or arguments. Student Learning Activity #2.

Detecting bias. Student Learning Activity #4.

STUDENT LEARNING ACTIVITIES:

1. Invite a salesperson from a local horticultural business to speak to the class. Have the person describe his/her work as a salesperson emphasizing: (1) What attributes he/she needs to be successful in his/her work; (2) What this person likes about the work; and (3) What he/she dislikes about the job. Using ACT-1, have students list the requirements, likes, and dislikes stated by this person about his/her work. Using TM-2, discuss the students' lists. On the overhead projector, compile a list based on the class discussion and students' lists. Have students read the references for this lesson and have them write a one-page paper on "The Importance of Selling in the Horticultural Business."

2. Review and discuss TM-3, 4 and 5. Have each student list three purchases they are ready to make in a local business. Give each student three copies of ACT-6 and ask that they complete on the salesperson for each of the purchases. Have students share with the class the similarities and differences between each salesperson.

3. Review and discuss TM-7, 8 and 9 with the class. Bring three products sold by horticultural businesses to class. Give each product to a student and ask each to prepare and demonstrate how each would sell the product. After each demonstration, discuss with the class each demonstration in light of the information presented on TM-7, 8 and 9. Have each student use the following outline when preparing and presenting his/her demonstration:

   Approach

   Talking points

   Demonstration

   Related ideas

   Substitutions

   Closing the sale

At the conclusion of this activity, have each student complete ACT-10. Have students report their results to the class and discuss their reactions to the questions.

4. Hand out and have students read INFO-11 and TM-12. Assign a product sold in a florist shop, garden center, greenhouse or nursery to each student. Assign a different product to each student. Using ACT-13, have each student study that product and complete the activity sheet. Discuss students' summaries with the class.

5. Review and discuss TM-14, 15, and 16. Secure several used telephones from the local telephone company. Set them up in a horticultural business setting. Develop a number of customer business situations providing a description of the customer need, price information, services the business provides (and other information relevant to the situation). Pair up students in the class. Appoint one student as the customer and the other the business employee. Assign each pair of students one of the business situations and have them demonstrate proper telephone use before the class. Have student taking the order complete INFO-17. Assign a student to evaluate each conversation using ACT-18.

6. Review TM-19 and 20. Using the information provided on TM-10 and 11, have students describe how the salesperson who sold purchases each student made in Student Learning Activity #2 closed the sale for each purchase in a one-page description of the sale closings.

7. Review and discuss the types of displays used in horticultural businesses. Have students visit a horticultural business and list the number of displays and their types. Review and discuss the points on TM-21. Group students and have them diagram a plan for a display (window, island, table, or wall display) on a plain white sheet of paper. When this plan is finished, have them set up a display of horticultural products. Needed to complete this activity will be horticultural products to display (plants, flowers, products, etc), empty boxes to secure varying heights

in the display, cloth materials to accentuate the display, and products related to the product on sale.

CONCLUSION:

Salesmanship is the art of selling. It is one element of good merchandising. It is an art that takes practice.

A salesperson:

Must have the initiative for selling.

Must like people.

Be ambitions, dependable and efficient.

Have good health.

Have a pleasing personality and appearance.

Be diplomatic and cautious.

Get along well with others.

Have a thorough knowledge of store merchandise, prices and policies.

In a horticultural business there are three types of salespersons. They are: the order taker, the negotiation type, and the creative salesman. The order taker just takes orders. The negotiation type bargains with the customer. The creative salesman upsells the merchandise and persuades the customer to spend the most money for what he or she wants.

Courage and confidence are two important factors of a successful salesman. A good salesman has a winning personality, constantly strives to improve, and is able to communicate with the customer.

There are four important components of an approach to lead a customer to a sale. They are:

Using the business name in all discussion.

Letting the customer know the name of the person handling the sale.

Finding out the customer's name and remembering it.

Determining the customer's need and trying to fill it.

A good salesman will:

Sell himself or herself.

Sell the store or business.

Sell his or her ideas.

Sell the product.

Sell customer satisfaction.

The four important steps to ever successful sale are:

Interest the customer in the merchandise and your ideas.

Convince the customer of the need for the product or service.

Ask for the sale.

Sell customer quality.

Six points for selling quality are as follows:

Establish a quality atmosphere.

Sell significant benefits of the merchandise.

Point out the superior features of the merchandise.

Emphasize exceptional values.

Sell the experience and reputation of the business.

Sell friendly reliable serve.

Every salesperson in a horticultural business should keep the following points in mind to be successful in his/her job:

Appreciate the opportunity you have to be engaged in the greatest business in the world.

Compliment your customers honesty and sincerity.

Dedicate yourself to making a successful career of selling.

Enthusiasm is contagious and will help sales.

Find the key reason why your customer wants to buy.

Give attention and service to your customer.

Hesitate before answering questions your customer asks

Imagine your customer enjoying the benefits of what you are selling.

Justify every sales point you make so your customer is convinced of the truth of what you are saying.

Know all you can about your merchandise.

Listen for key words your customer uses when talking.

Memorize your customer's name when you first hear it.

Nail down each sales point in step-by-step strategy.

Obligate your customer to buy with an extra bit of service to him.

Persuade with all the enthusiasm you can generate.

Quote authorities.

Refrain from knocking your competition.

Trade the benefits of what you are selling for your customer's dollar.

Use all the tricks of the trade in selling: enthusiasm, tact, confidence and security.

Visualize your customer owning and enjoying the benefits of your merchandise

Work at selling.

X-ray your customer's buying mind to discover the real reasons why your customers will or will not buy.

Zip up the sale quickly

A salesperson in a horticultural business should avoid:

Neglecting customers.

Distraction and confusion in the store.

Not attempting to up-grade the sale.

Not attempting to sell related merchandise.

Lack of knowledge about merchandise being sold.

Not suggesting uses to which the merchandise can be put.

Not attempting to close the sale.

Not showing merchandise to the customer.

Too much conversation.

A large portion of the sales in horticultural businesses is transacted over the telephone. Only experienced employees should use the telephone representing the business. When an employee uses the telephone to sell for a business, the employee should:

Answer the telephone promptly.

Speak clearly and distinctly.

Give the name of the business and the employee's name.

Be cheerful and friendly.

Be courteous even with wrong numbers.

Avoid coughing into the mouthpiece.

Never drop the receiver while the customer is on the line.

Always let the customer hang up first.

Know what merchandise is available and at what price.

Be sure to spell names and addresses correctly.

Repeat orders.

Be sure delivery information is correct.

Be helpful.

Treat the customer with consideration.

Use good English.

Help customers decide by making suggestions.

Acknowledge customer's likes and dislikes.

Always ask if there is anything else the customer needs.

When using the telephone, an employee should avoid:

Slow, indifferent and incomplete answering of the telephone.

Failing to listen to what the customer wants.

Failing to use word pictures.

Failing to sell extra items, large quantities, or better merchandise.

Failing to ask the customer to buy.

Winning the argument and losing the sale.

Failing to follow through.

The most important part of making a sale is properly closing the sale. The sale is not complete until the customer has made a definite decision. The salesperson should be satisfied that he has answered all questions or objections in the customer's mind. At this time the salesperson should try to get a firm decision from the customer.

The following points should be considered when completing a sale:

DO'S AND DON'TS - CLOSING A SALE:

Do display a friendly manner at the close, even though there is disagreement between the prospect and the salesman. This helps to avoid arguments.

Do be sure to have all materials and equipment that will be needed. Misplaced order blanks, obsolete price lists, and dry fountain pens can lose sales.

Do realize that begging for a sale makes the salesperson and the offer look bad--it also disgusts the prospect.

Do ask the prospect to "OK" or approve the order rather than sign it.

Do make buying as easy and painless as possible.

Do try for privacy at the close. Phone calls and third parties distract.

Do study each prospect as a baseball pitcher studies each batter. Then pitch to his weakness.

Do lead the prospect to think of himself as the owner of the product from the beginning of the interview.

Don't let the prospect know how much the sale means.

Don't be apologetic, particularly in quoting price.

Don't make a ceremony out of closing, lest the prospect becomes frightened.

Don't give the prospect an excuse or an opportunity to back away from the purchase.

Don't ever ask the prospect for the buying decision in such a way that he can answer with a "Yes" or a "No" for the latter closes the door.

Don't make it difficult for the prospect to complete the purchase quickly if the prospect cares to do so.

Don't let the prospect miss seeing that the salesperson expects the prospect to buy.

Don't make it easier for the prospect to refuse than to buy.

Every salesperson expects to lose some sales. Too many lost sales should be a sign of concern to the conscientious salesperson. The salesperson should analyze the last sale to see what went wrong. The salesperson should consider:

How was the greeting?

Was my personal appearance good?

Did I have confidence in myself?

Did I have a knowledge of the product?

Did I talk too much?

Did I overcome objections?

Did the objections confuse me?

Did I properly demonstrate the merchandise?

Was any question raised that I could not answer?

Did I indicate the services that were available for the merchandise?

Did I recognize when it was time to close the sale?

Displays in horticultural businesses constitute a large portion of the business's advertisement. Attractive and orderly arrangement of displays and stock will enhance sales. Ninety percent of the store merchandise should be on display. Three types of displays should be used: namely, low display tables, island tables, and wall displays.

EVALUATION:

Upon completion of this lesson, students will be able to:

Define salesmanship and describe its importance to horticultural businesses.

List the characteristics of a good salesman.

List the steps in conducting an effective sale.

Use the telephone to sell horticultural merchandise.

Describe how to close a sale.

Set up attractive merchandise displays.

REFERENCES:

The Retail Florist Business. Pfhal, Peter B. The Interstate Printers and Publishers, Inc., Danville, Illinois.

Selling and Salesmanship. Agricultural Education Service, Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

WORK OF A SALESPERSON

The Work of a Salesperson in a ___________ Business

As you listen to the salesperson speaking to our class, list those points that the person makes about his/her work under the appropriate categories below.

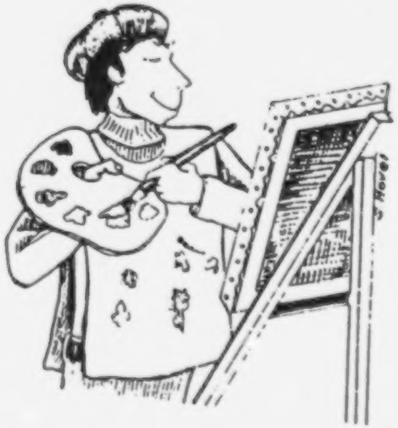
Requirements of the work of a salesperson:

Aspects of work salesperson liked:

Aspects of work salesman disliked:

TM-2

Salesmanship



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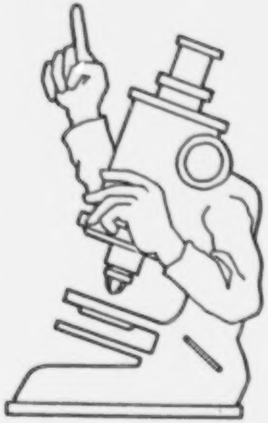
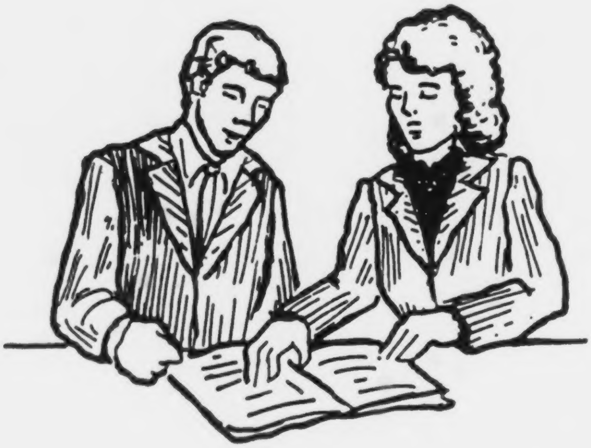
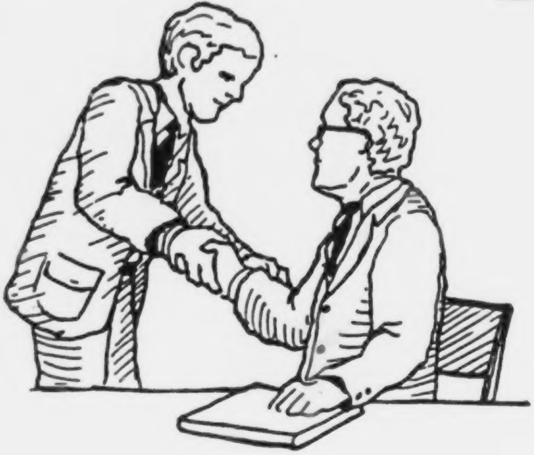


The art and science of selling

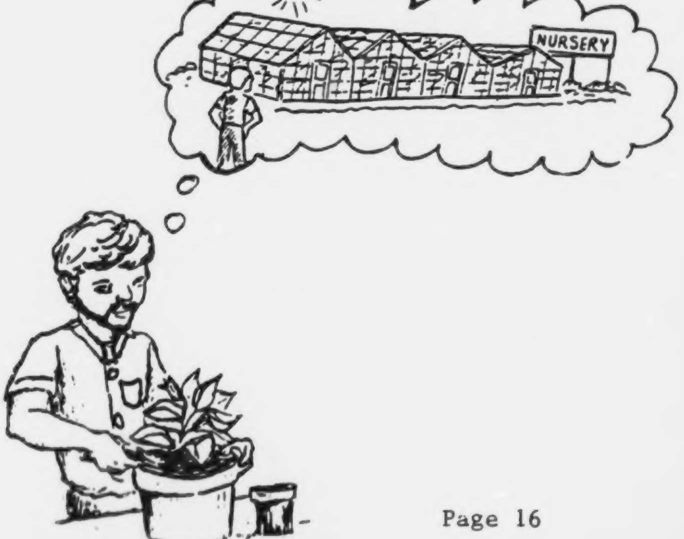
Types of Salespersons

Order Taker





Negotiation Type



Creative Salesman

An Effective Salesperson Should:

Take the initiative for selling

Like people

Be ambitious, dependable, and efficient

Have good health

Have pleasing personality and appearance

Be diplomatic and courteous

Get along well with others

Know store merchandise, prices, and policies

A Salesperson Must:

Have Courage

Have Confidence

Have a winning personality

Constantly strive to improve

Communicate well with others

Sales Approach Analysis

Indicate your perception about the sales approach you experienced when making your purchase.

Type of salesperson: _____ Order Taker

_____ Negotiation Type

_____ Creative Salesman

Rate the salesperson:

	Very Much	Much	Some	Little	None
Showed initiative to sell	5	4	3	2	1
Liked people	5	4	3	2	1
Was ambitious	5	4	3	2	1
Was efficient	5	4	3	2	1
Had good health	5	4	3	2	1
Had a pleasing personality	5	4	3	2	1
Had a pleasant appearance	5	4	3	2	1
Was courteous	5	4	3	2	1
Knew the merchandise	5	4	3	2	1
Was confident	5	4	3	2	1
Communicated easily with you	5	4	3	2	1

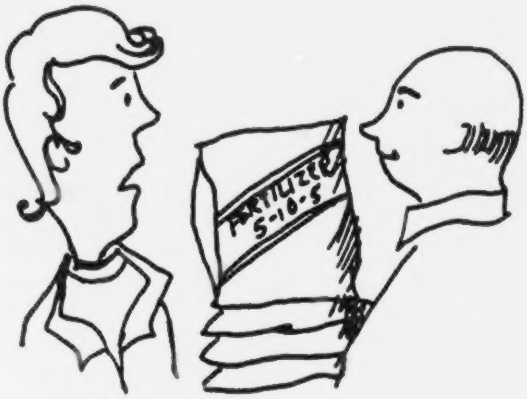
When Leading the Customer to a Sale

Use the business name in all discussions.

Tell the customer your name.

Find out and remember customer's name.

Determine customer's needs.



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Steps to a Successful Sale

Interest the customer in the merchandise and your ideas.

Convince the customer of the need for the merchandise.

Ask for the sale.

Sell customer quality.

Six Points for Selling Quality

#1. Establish a quality atmosphere

#2. Sell significant benefits of merchandise

#3. Point out the superior features of the merchandise

#4. Emphasize exceptional values

#5. Sell the experience ad reputation of the business

#6. Sell friendly reliable service

SELF-ANALYSIS OF INTEREST IN SALES WORK

Which of these statements describes you? If the answer is "yes," draw a circle around the "Y." If the answer is "no," draw a circle around the "N." It is in your own interest to be as fair and accurate as possible in your answers.

1. I'd rather deal with things than with people . . . Y N
2. I think mathematics is a very interesting subject . . . Y N
3. I like talking to strangers . . . Y N
4. I dislike group activities . . . Y N
5. People find it easy to approach me . . . Y N
6. I would like to do research in science . . . Y N
7. I'd enjoy raising money for a worthy cause . . . Y N
8. I prefer to be by myself . . . Y N
9. I've more than average desire to own things . . . Y N
10. I would like to design farm implements . . . Y N
11. I would like to attend conventions . . . Y N
12. I've more than average mechanical ingenuity . . . Y N
13. I dislike people who borrow things . . . Y N
14. I would like to be a mechanical engineer . . . Y N
15. I like people of all nationalities in my community . . . Y N
16. I'd like to work a 40-hour week . . . Y N
17. I would enjoy making speeches . . . Y N
18. I'd like to be head of a research department . . . Y N
19. I like to keep meeting new people . . . Y N
20. I enjoy bargaining when I'm buying something . . . Y N
21. I'd like to develop some new scientific theories . . . Y N
22. I'd like a straight salary in my life work . . . Y N
23. I prefer only a few really intimate friends . . . Y N
24. I'm better than average at judging values . . . Y N
25. I like to get other people's viewpoint . . . Y N

ABC'S OF SELLING

Appreciate the opportunity you have to be engaged in the greatest business in the world

Believe in what you are selling

Compliment your customer's honesty and sincerity

Dedicate yourself to making a successful career of selling

Enthusiasm is contagious and will help your sales

Find the key reason why your customer wants to buy

Give attention and service to your customer

Hesitate befoe answering questions your customer asks

Imagine your customer enjoying the benefits of what you are selling

Justify every sales point you make so your customer is convinced of the truth of what you are saying

Know all you can about your merchandise

Listen for key words your customer uses when talking

Memorize your customer's name when you first hear it

Nail down each sales point in step-by-step strategy

Obligate your customer to buy with an extra bit of service to him

Persuade with all the enthusiasm you can generate

Quote authorities

Refrain from knocking your competition

Trade the benefits of what you are selling for your customer's dollar

Use all the tricks of the trade in selling: enthusiasm, tact, confidence and sincerity

Visualize your customer owning and enjoying the benefits of your merchandise

Work at selling

X-ray your customer's buying mind to discover the real reason why your customer will or will not buy

Zip up the sale quickly

A Salesperson Should Avoid:

Neglecting customers

Distractions and confusion in the store

Failing to upgrade the sale

Failing to sell related merchandise

Lack of knowledge about merchandise being sold

Failing to suggest uses for merchandise

Failing to close a sale

Failing to show merchandise to the customer

Too much conversation

____
Product

WHAT A SALESPERSON SHOULD KNOW ABOUT THE PRODUCT HE/SHE HANDLES

Use of the product: ______________________
____

How the product works: (or how used?) ______________________
____

What the product is made of: ______________________
____

How the product is made: ______________________
____

Instructions for using: ______________________
____

Who is manufacturer: ______________________

Storage of product: ______________________
____

Maintenance of product: (if not consumable) ______________________
____

Packaging: (sizes and material) ______________________
____

Prices: ______________________
____

When Using the Telephone

Answer the telephone promptly.

Speak clearly and distinctly.

Give name of the business.

Give employee's name.

Be cheerful and friendly.

Be courteous.

Avoid coughing into the mouthpiece.

Never drop the receiver with the customer on the line.

Always let the customer hang-up first.

Know what merchandise is available and at what price.

Spell names and addresses correctly.

Get correct delivery information.

Use good English.

Help customers decide.

Acknowledge customer's likes and dislikes.

Ask if there is anything else the customer needs.

When Using the Telephone Avoid:

Slow, indifferent and incomplete answers.

Failing to listen to what the customer wants.

Failing to use word pictures.

Failing to sell extra items, larger quantities, or better merchandise.

Failing to ask the customers to buy.

Winning the argument and losing the sales.

Failing to follow through.

When Selling on the Telephone

* Answer promptly

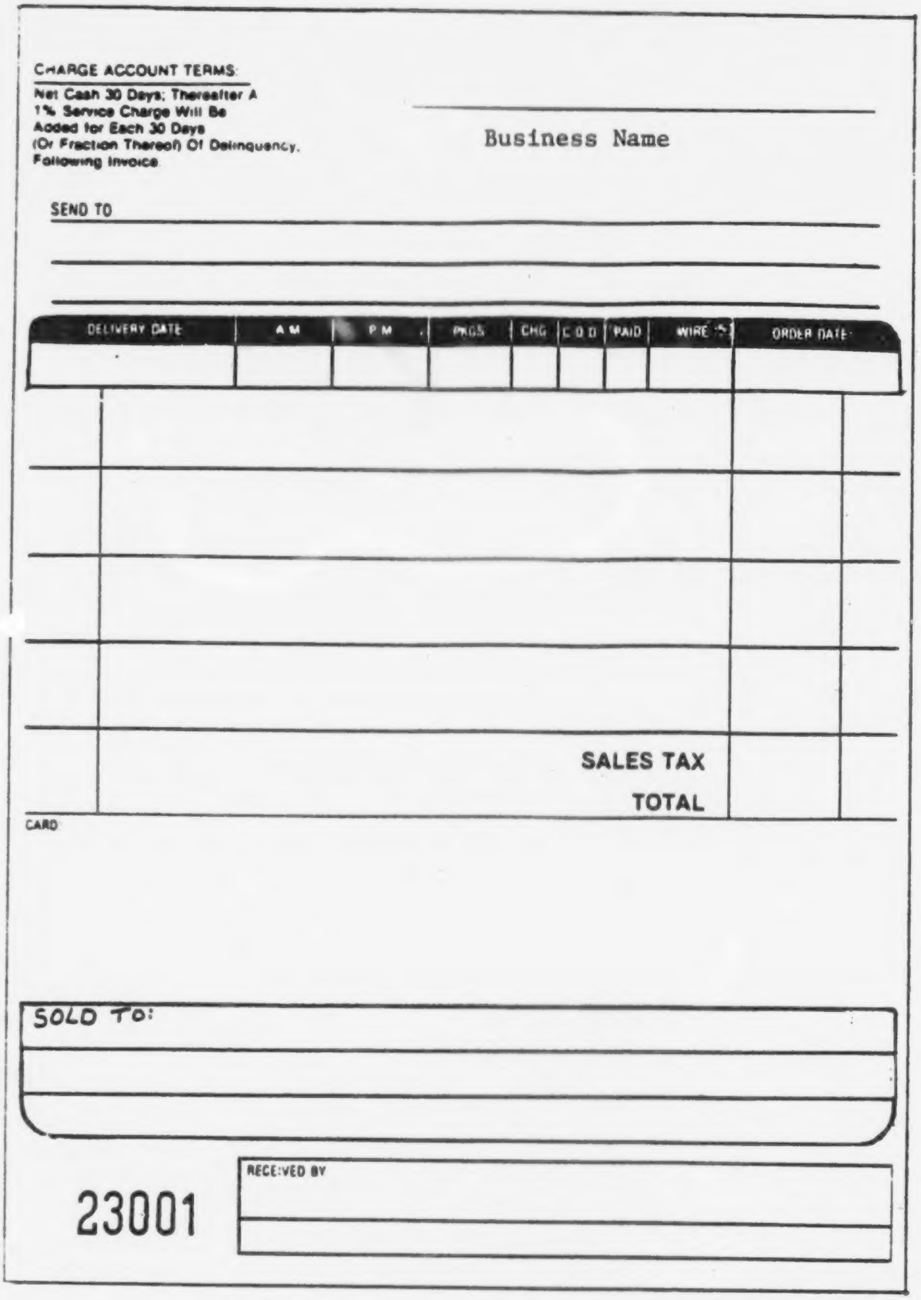
* Be business-like

* Be alert and pleasant

* Quote prices

* Get customers to come into store

HORTICULTURAL ORDER FORM



CHARGE ACCOUNT TERMS:
Net Cash 30 Days; Thereafter A
1% Service Charge Will Be
Added for Each 30 Days
(Or Fraction Thereof) Of Delinquency,
Following Invoice

Business Name

SEND TO

DELIVERY DATE	A.M.	P.M.	PKGS	CHG	C.O.D.	PAID	WIRE	ORDER DATE

	SALES TAX TOTAL		

CARD

SOLD TO:

23001

RECEIVED BY

TELEPHONE CONVERSATION EVALUATION FORM

	Yes	No
Answered promptly	___	___
Spoke clearly	___	___
Gave name of business	___	___
Game name of employee	___	___
Was cheerful	___	___
Was friendly	___	___
Was courteous	___	___
Knew merchandise being sold	___	___
Let customer hang-up first	___	___
Checked on spelling of names	___	___
Checked addresses	___	___
Provided delivery information	___	___
Helped customer	___	___
Used good English	___	___
Helped customers decide	___	___
Acknowledged likes and dislikes	___	___
Asked for other needs	___	___

When Closing a Sale

Display a friendly manner at the close.

Have all materials and equipment that will be needed.

Realize that begging for a sale makes the salesperson and the offer look bad.

Ask the prospect to "OK" or approve the order rather than sign it.

Make buying as easy and painless as possible.

Try for privacy at the close.

Study each prospect as a baseball pitcher studies each batter.

Lead the prospect to think of himself as the owner of the product from the beginning of interview.

When Closing a Sale, Do Not

Let the prospect know how much the sale means.

Be apologetic, particularly in quoting price.

Make written or even oral promises unless authorized to do so.

Make a ceremony out of closing.

Give the prospect an excuse or an opportunity to back away from the purchase.

Ever ask the prospect for the buying decision in such a way that he can answer with a "Yes" or a "No".

Make it difficult for the prospect to complete the purchase quickly if the prospect cares to do so.

Let the prospect miss seeing that the salesperson expects the prospect to buy.

Make it easier for the prospect to refuse than to buy.

When Making a Product Display

Make the display advertise the merchandice and character of the store.

Mark price plainly.

Display related items together.

Tie in displays with local events.

Tie in with national advertising.

Put human interest into the display.

Do not crowd display.

Change displays frequently.

Keep display clean.

Use motion to attract attention.

Make display sell merchandise.

PROBLEM AREA 6

HOW DO HORTICULTURAL BUSINESSES PROMOTE THEIR BUSINESS TO THE PUBLIC?

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ACT-9 Newspaper Ad Layout....17

PROBLEM 6: How do horticultural businesses promote their business to the public?

INTEREST APPROACH:

Bring to class several forms of advertising used by horticultural businesses in the community. Included in those forms of advertising should be newspaper ads, pictures of store advertising, window displays, and if possible, taped radio spot announcements. Have members of the class rank each form of advertisement as to its effectiveness in inducing each class member to purchase the product. Pool the rankings for the class and question the class as to why they ranked the advertisements as they did. Compare and discuss the differences between each form of advertisement.

STUDY QUESTIONS:

1. What is meant by advertising and publicity?
2. What constitutes effective advertising?
3. What should a manager of a horticultural business consider when planning an advertising campaign?
4. What methods of advertising do horticultural businesses use to sell their products?
5. What should sales managers in a horticultural business keep in mind when advertising in a newspaper?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Develop independent thinking. Student Learning Activity #7.

Use human relations skills. Student Learning Activity #4.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve students' speaking vocabulary. Student Learning Activity #2.

Improve students' abilities to participate intelligently and courteously in conversations and discussions. Student Learning Activity #3.

Strengthen students' abilities to comprehend speaker's major points and supporting points. Student Learning Activity #1.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguish between warranted and unwarranted claims. Student Learning Activity #2.

Detecting bias. Student Learning Activity #1.

Distinguish relevant from irrelevant information, claims or reasons. Student Learning Activity #6.

STUDENT LEARNING ACTIVITIES:

1. Invite a local nurseryman, garden center manager, and florist to your class and have them discuss with the students their advertising and publicity programs. Have students list specific characteristics of each employee' plan. Discuss student lists. Divide students into three groups and assign them one of the three lists. Using the list assigned, have each group layout a publicity program for a business for a 12-month period.

2. Present and discuss TM-1. Using TM-2 and ACT-3, evaluate and discuss the ad on TM-2. List ways the ad on TM-2 could be improved. Have students collect several horticulture business newspaper advertisements. Following the points identified on TM-1, have the students evalute each ad using ACT-3. For each ad, have students describe what might be done to improve the ad. Have each student make a transparency of one of each of his ads and show his analysis and suggestions for improving the ad with the class.

3. Review and discuss with the class TM-4 and TM-5. Using ACT-6, have students in the class lay out an advertising plan for the business described in ACT-6.

4. Assign students local businesses (horiticultural and non-horticultural) to visit and through discussion with the manager, determine what part of their gross sales they spend on advertising. Discuss the findings as a class comparing both types of businesses.

5. Review and discuss TM-7. Group students and have each group design and set up a display of products sold in a garden center, layout a store sign for a nursery, write a radio or television spot ad for a florist shop, and develop a direct mail ad and letter for a greenhouse grower selling three- and five-inch potted green plants. When students have completed each type of advertisement, have the class judge each group's work. Discuss the strengths and weaknesses of each group's work.

6. Have students secure horticultural trade magazines and compare the types of advertising that they see in these magazines.

7. Review and discuss TM-8. Bring several well done newspaper ads placed by a horticultural business to class. Make transparency masters of these ads and review and discuss the stenghths of each ad. Using ACT-9, have students prepare a newspaper ad for a nursery.

CONCLUSION:

The end result of advertising and publicity is to sell a product.

Advertising means offering a product to the consumer which results directly in selling merchandise.

Publicity sells ideas which eventually lead to selling merchandise.

Good advertising:

Informs, helping the consumer buy more intelligently.

Tells the truth.

Conforms to the generally accepted standards of good trade.

Recognizes both its responsibility to help pay its own costs and its social responsibility to serve the public.

When an employer or employee plans an advertising campaign, he/she should consider:

The area to be covered with the ad.

The cost in relation to the expected return.

Size of expenditure.

The age and reputation of the business.

Location of the business.

Time to advertise.

Long and short range objective of the program.

In addition to the above considerations, the following factors should be considered when planning the advertising program:

Advertising expenses should be compared with gross volume of sales.

Advertising expenses should be calculated for each month during the year.

The percent of the advertising expense devoted to each type of media should be determined.

The best space contract with the newspaper is secured.

The position assigned to the ad in the newspaper and the spot on the radio is acceptable.

The direct mailing list reaches all potential customers.

The mailing list is up-to-date.

The most effective postage rate on direct mail advertising is used.

Non-productive advertising has been determined.

The advertising of the business is as effective as the competition's.

The six factors to consider in determining an advertising budget are:

Size of business (florist, garden center, nursery, greenhouse)

Type of business

Length of time in business

Location

Competition

Size of market area

There are 17 different types of media used by horticultural businesses to sell their products. They are:

Window displays

Newspaper ads

Direct mail

Radio

Television

Store front sign

Sign on level

Yellow pages in the phone book

Business ads

Outdoor billboards

Magazines

Organizational magazines

Quality of products sold

Word-of-mouth

Phone call reminders to regular customers

Cooperative advertising

The best advertising media for horticultural businesses are:

Newspapers

Direct mail

Window display

Radio

Good newspaper advertisements are:

Planned

Persuasive

Persistent

Small ads in a newspaper help stretch business advertising dollars. When preparing newspaper ads, one should:

Stick to one idea and one only in a small space ad.

Select the readers.

Frame the ad so it will stand out.

Do not divide the ad into several parts.

Do not crowd the ad.

Make sure it is easy to read.

Include only the essentials.

EVALUATION:

Upon completion of this lesson, students will be able to:

Describe and differentiate between advertising and publicity.

Describe what constitutes effective advertising.

Plan an advertising campaign.

List methods horticultural businesses use to advertise merchandise for sale.

List factors to keep in mind about advertising in a newspaper.

REFERENCES:

The Retail Florist Business. Pfahl, Peter B. The Interstate Printers and Publishers, Inc., Danville, Illinois.

The Garden Center Worker. Urbanic, Charles E. Curriculum Materials Service, The Ohio Agricultural Education Department, 2120 Fyffe Road, Ohio State University, Columbus, Ohio.

GOOD ADVERTISING:

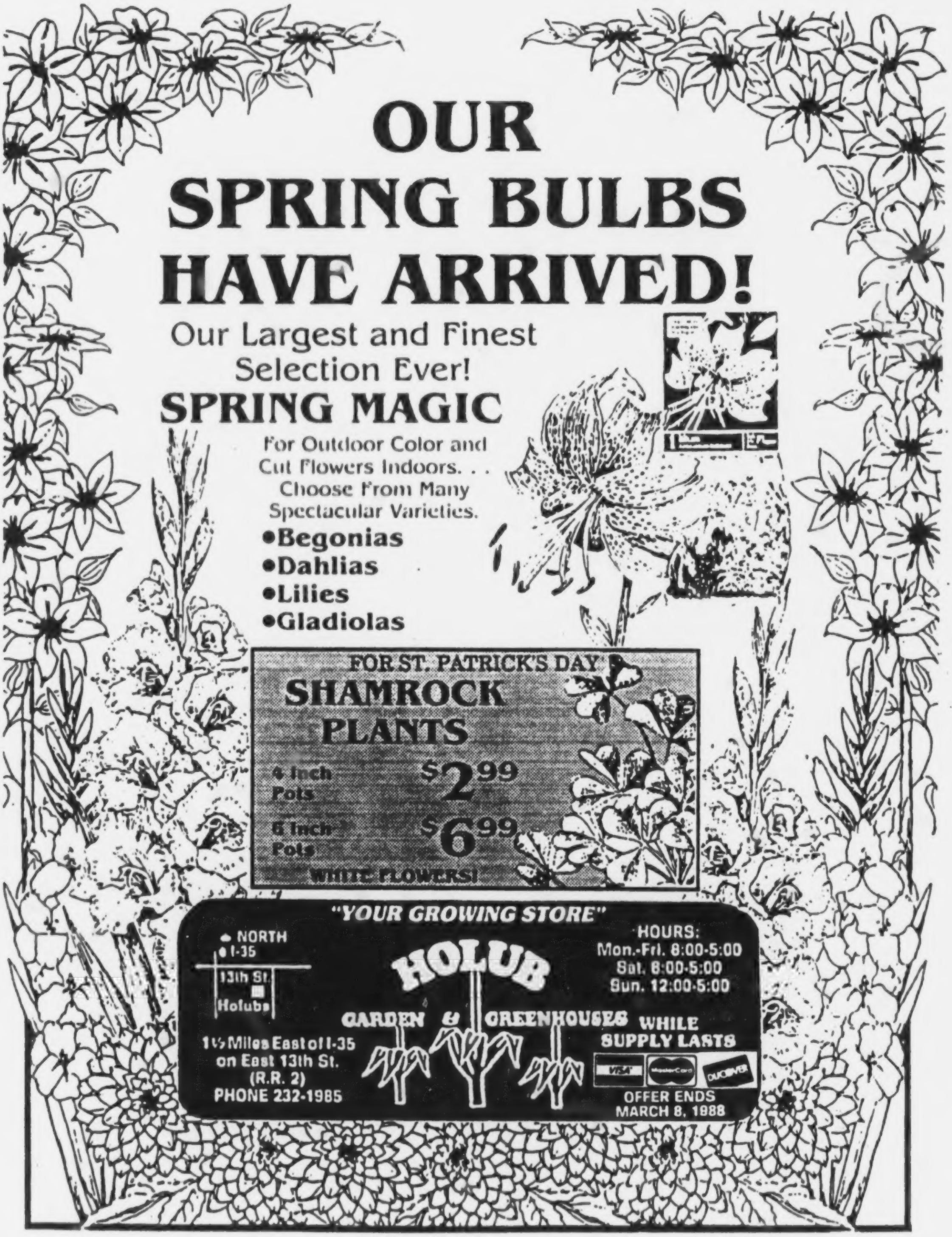
INFORMS

TELLS THE TRUTH

IS OF GOOD TASTE

PAYS ITS OWN COSTS

SERVES THE PUBLIC



OUR SPRING BULBS HAVE ARRIVED!

Our Largest and Finest
Selection Ever!

SPRING MAGIC

For Outdoor Color and
Cut Flowers Indoors. . .
Choose From Many
Spectacular Varieties.

- **Begonias**
- **Dahlias**
- **Lilies**
- **Gladiolas**

FOR ST. PATRICK'S DAY

SHAMROCK PLANTS

4 Inch Pots	$2.99
6 Inch Pots	$6.99

WHITE FLOWERS!

"YOUR GROWING STORE"

NORTH
I-35
13th St.
Holubs

HOLUB GARDEN & GREENHOUSES

1½ Miles East of I-35
on East 13th St.
(R.R. 2)
PHONE 232-1985

HOURS:
Mon.-Fri. 8:00-5:00
Sat. 8:00-5:00
Sun. 12:00-5:00

WHILE SUPPLY LASTS

VISA MasterCard DISCOVER

OFFER ENDS
MARCH 8, 1988

NEWSPAPER AD EVALUATION

Evaluate your newspaper ads using the following scale:

To what degree did the ad:

	Very Much	Much	Some	Little	None
Inform the public	5	4	3	2	1
Tell the truth	5	4	3	2	1
Appear in good taste	5	4	3	2	1
Pay for its cost	5	4	3	2	1
Serve the public	5	4	3	2	1

TOTAL SCORE ______

List what you would do to improve the ad?

AN ADVERTISING CAMPAIGN SHOULD INCLUDE:

The area to be covered
Costs related to returns
Size of expenditures
Age and reputation of the business
Location of the business
Advertising schedule
Long range objectives
Short range objectives

Factors to Consider when Advertising

- Advertising expense compared to gross sales
- Calculation of monthly advertising expenses
- Percent of advertising devoted to each type of media
- Best space contract with the newspapers
- Position of ad in paper
- Mailing direct to potential customers
- Maintaining an up-to-date mailing list
- Most effective mailing rates
- Non-productive advertising
- Competition with other businesses

DEVELOPING AN ADVERTISING CAMPAIGN

It is February and the Town and Country Nursery, a reputable 25-year old business is preparing for its spring sales campaign. The business is located two miles south of town. They have a large supply of eight-foot pin and red oaks that they want to sell in the spring.

Using the points on TM-5 and selected references, lay out a sales campaign for selling these two trees. One point to consider is that the soils in the sales area are low in iron.

Sales area to be covered (use your community):

Costs vs. returns:

Size of expenditures:

Type	Amount

Time schedule for advertising:

Short range objectives:

Long range objectives:

TYPES OF ADVERTISING MEDIA

Window display
Direct mail
Television
Sign on trucks
Organizational magazines
Outdoor billboards
Cooperative advertising
Quality of product sold

Newspaper ads
Radio
Store front sign
Yellow pages
Bus ads
Word-of-mouth
Phone chain
Magazines

WHEN PREPARING NEWSPAPER ADS:

Stick to one idea

Select your readers

Frame ad so it will stand out

Do not divide the ad

Do not crowd the ad

Make sure it is easy to read

Include only the essentials

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NEWSPAPER AD LAYOUT

Situation:

The Kupfer Nursery is having a sale on bedding plants. All bedding plants are selling for 99 cents for a flat of four plants. Included among the plants are annual and perennial plants and all types of vegetable plants. The sale will cover seven days. The nursery is located at 108 East Main Street and store hours are from 8:00 a.m. to 9:00 p.m. Mr. Kupfer wants a quarter page ad to appear in the newspaper. Lay out the ad that you would submit to the newspaper.

PROBLEM AREA 7

HOW IS MONEY HANDLED IN HORTICULTURAL BUSINESSES?

Contents

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TM-10 When Accepting a Check, Look for..................22

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PROBLEM 7: How is money handled in horticultural businesses?

SITUATION:

One evening after closing the shop, the manager of Flower World florist shop was counting the money in the cash register. When he compared the amount of money in the cash drawer with the sales journal provided by the cash register, he found that he was short $35.60 in cash. He knew he could trust his employees and didn't think the money had been stolen by one of them. He called his employees together and shared the situation with them and asked if they could help him explain how the shortage developed. After considerable discussion one of the employees remembered that one of the customers that day had paid him with a $50 bill. The customer asked that he break the $50 while paying for the products that he bought. He needed the extra change for future purchases. In the process the employee broke down the $50 and forgot to take out the amount of the purchase, $14.40. What should the employee have done to avoid this situation?

STUDY QUESTIONS:

1. How is change made when customers pay bills in horticultural businesses?
2. What are the components of a cash register?
3. How are bank deposit slips used in horticultural businesses?
4. How are checks used in horticultural businesses and are they properly written?
5. What should an employee check before accepting personal checks for payment of store purchases?
6. How are bank statements used in horticultural businesses?
7. How are credit cards used in horticultural businesses?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Manage finances. Student Learning Activity #5.

Accept an ethical system to guide behavior. Student Learning Activity #6.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Use decimals. Student Learning Activity #1.

Write legibly. Student Learning Activity #4.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguish relevant and irrelevant information. Student Learning Activity #6.

Recall information accurately. Student Learning Activity #2.

STUDENT LEARNING ACTIVITIES:

1. Discuss with the class the importance of making proper change and how to do it. Have students complete ACT-1. Check students' answers working out ACT-1 on a transparency of ACT-1.

2. Give students ACT-2, and using the references cited, have the students describe the function of each cash register component. Hand out ACT-3 and have students label the parts of the cash register.

3. Review the parts of a bank deposit slip on TM-4 and 5. Have students complete ACT-6a using the blank deposit slips provided (ACT-6b and 6c).

4. Review and discuss TM-7 and 8. Have students complete ACT-9 (writing checks). Have students compare their work with TM-7. Review and discuss TM-10, how to check on checks received by employee.

5. Review and discuss TM-11.

6. Secure a credit card machine, a Mastercard or VISA credit card, and the blank credit card slips. Review TM-12. Using the credit card, machine, and credit card slips, have students complete ACT-13.

CONCLUSIONS:

Change should be made for customers in the following manner:

Leave the customer's bill lay on the ledge of the cash register or on top of the change drawer until change has been made.

Use the addition method of making change.

The cash register is a very important piece of equipment in a horticultural business. The components of the cash register are:

Department keys

Sales journal

Control keys

Amount keyboard

Receipt

Central lock slide

Display area

Indication rows

Amount indicators

Key release lever

Register lock

Motor bar

Hand crank opening

Activity counters

Cash drawer

All the money that goes from the florist shop, nursery, garden center, or greenhouse to the bank needs to be recorded on a bank deposit slip or a deposit ticket.

The slip should be made in duplicate with one copy going to the bank with the money and the other copy staying at the business for checking of records.

There are a number of important entries to be made on the deposit slip or deposit ticket. These entries are:

The name of the business making the deposit

The date

Currency

Silver

Checks as follows

Total

Checks are written to draw money out of the bank. They are used by horticultural businesses to pay bills and purchase merchandise.

Checks will show:

The business name.

Space to provide name of the person or firm to whom the money is to be paid.

The date the check is written.

The exact amount of the check written and the exact amount of the check given as numbers.

The name of the bank upon which the check is being drawn.

The person's signature who is writing the check.

Magnetic symbols which identify the customer having the account with the bank.

There are four types of check endorsement:

Blank endorsement: The payee merely writes his name on the back of the check.

Special endorsement: This endorsement names the person to whom the check is to be paid and who must sign before cashing it.

Qualified endorsement: The words "without recourse" may be inserted above the signature of the endorser.

Restricted endorsement: This endorsement limits further negotiation of the check.

When accepting a check, employees should look for:

The bank issuing the check.

The date of the check.

Magnetic symbols.

The amount of the check.

Name of person making the check.

Signature.

Whether the check is for more than the purchase.

Second party checks.

Identification.

The bank balance reported on the monthly bank statement is like the daily cash balance only reported monthly. It shows all deposits and checks written for the month. Bank statements are used in horticultural businesses to validate business accounts and to check for errors in business and bank accounting.

Start with the last balance figure on the bank statement.

Add back to this any service items that have been deducted.

Subtract the amount of checks that have been written at the place of business but have not yet come to the bank.

This should give the balance that is in the company check record.

If these do not balance, each item of deposit or check written will have to be checked.

It is common for horticultural busineses to allow customers to pay for purchases using a credit card. Credit cards commonly used in these businesses are Mastercard, VISA, and American Express. When a customer offers a credit card to pay for his or her purchase, the following procedure should be followed in charging the purchase to the customer:

Check the name and address on the card.

Check the expiration date and write it on the charge slip.

Check to see whether the card is valid to use.

Some businesses use a scanner, others have a book that lists invalid credit card numbers.

Get clearance from the parent company for large purchases.

Fill out credit slip. Be sure the information on the credit card comes through clearly on the sales slip after running it through the credit card machine.

Have customer review the charge slip and sign it.

Have customer put his/her telephone number under his/her name.

Give customer his copy of the credit slip.

Tear out and destroy all carbons.

Ring up sale in cash register.

EVALUATION:

Upon completion of this lesson, students will be able to:

Make correct change.

Identify the components of a cash register.

Prepare a bank deposit slip.

Describe how checks are used in a horticultural business and properly write a check.

Identify mistakes in writing checks.

Use bank statements to check money flow.

Properly complete a credit card sales slip.

REFERENCES:

Business Procedures and Records. Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

Office Procedures Used in the Agricultural Service. Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

Mathematics for Horticulture. Peltier, Ruth A. Ohio Agricultural Education Curriculum Materials Service, Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

DETERMINING CORRECT CHANGE

Money Tendered	Total Purchase	Change in Coins					Change in Bills				Total Change
		1¢	5¢	10¢	25¢	50¢	$1	$5	$10	$20	
$15.00	$12.43										
50.00	42.92										
5.00	2.63										
20.00	19.53										
5.00	1.07										
7.75	7.62										
125.00	111.35										
1.00	.18										
5.00	4.23										
10.00	7.82										
1.50	1.28										
200.00	187.52										
20.00	16.92										
3.00	2.12										

FUNCTIONS OF CASH REGISTER COMPONENTS

Listed below are the parts of the cash register. In the space provided, describe the functions of each part.

Department keys:

Sales journal:

Control keys:

Amount keyboard:

Receipt:

Central lock slide:

Display area:

Indicator rows:

Amount indicators:

Key release lever:

Cash Register Components Cont'd.

Register lock:

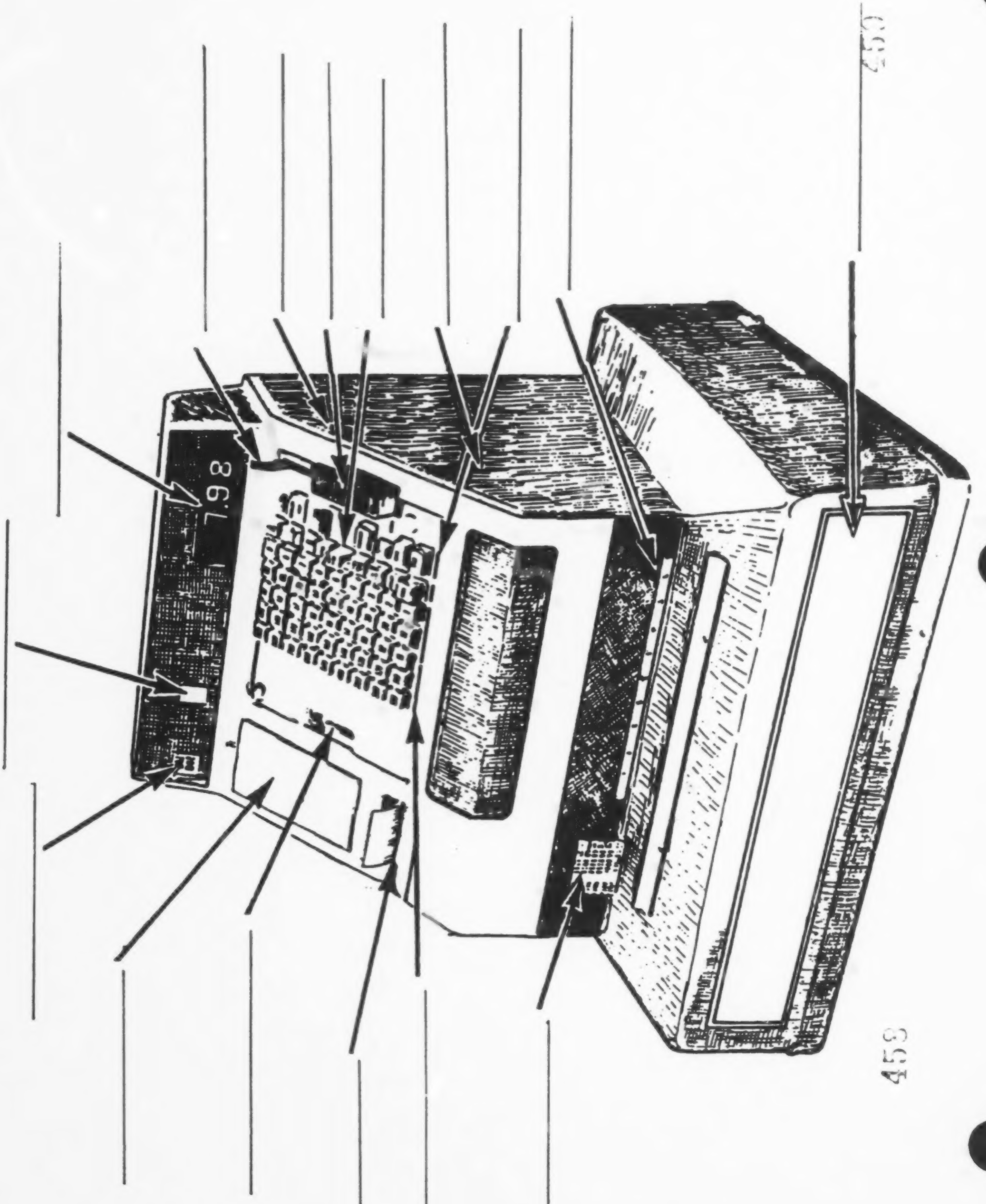
Motor bar:

Hand crank opening:

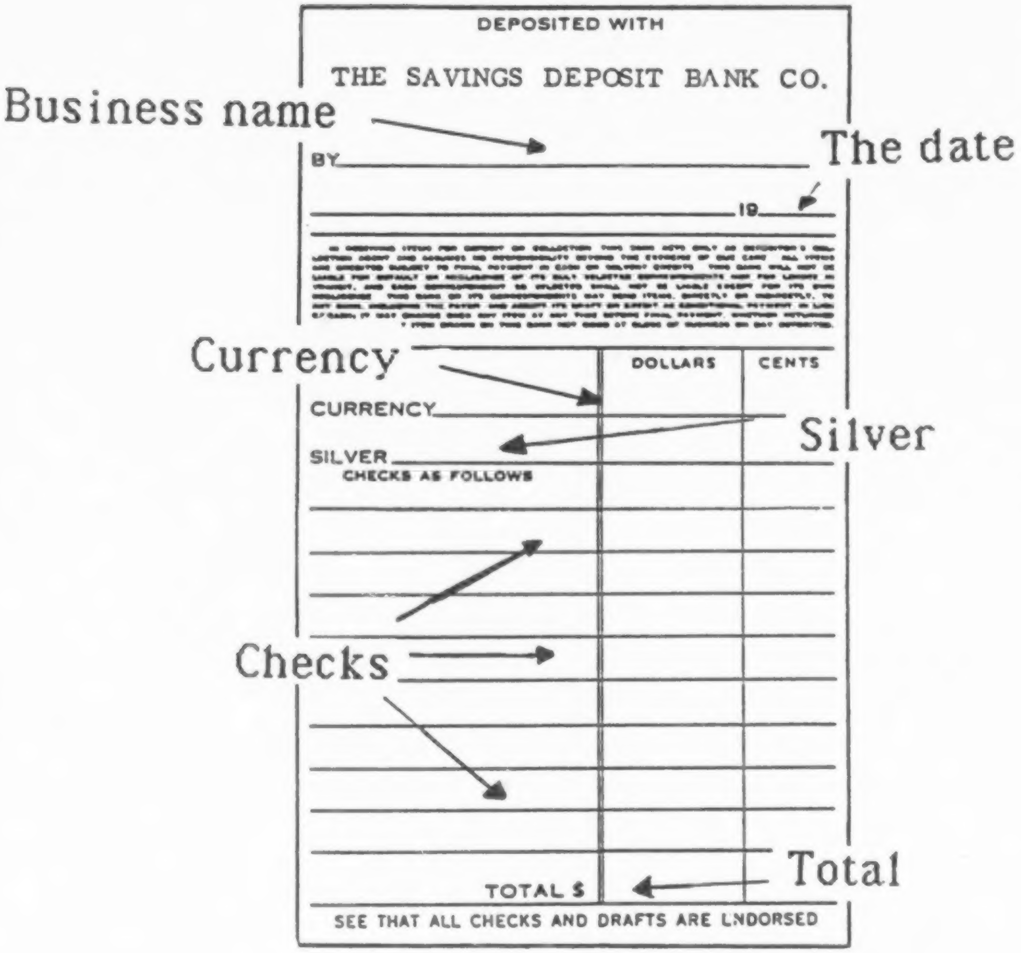
Activity counters:

Cash drawer:

Cash Register - Identification



Parts of Bank Deposit Slip



DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY____________________

____________________ 19____

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE LNDORSED

Business name

The date

Currency

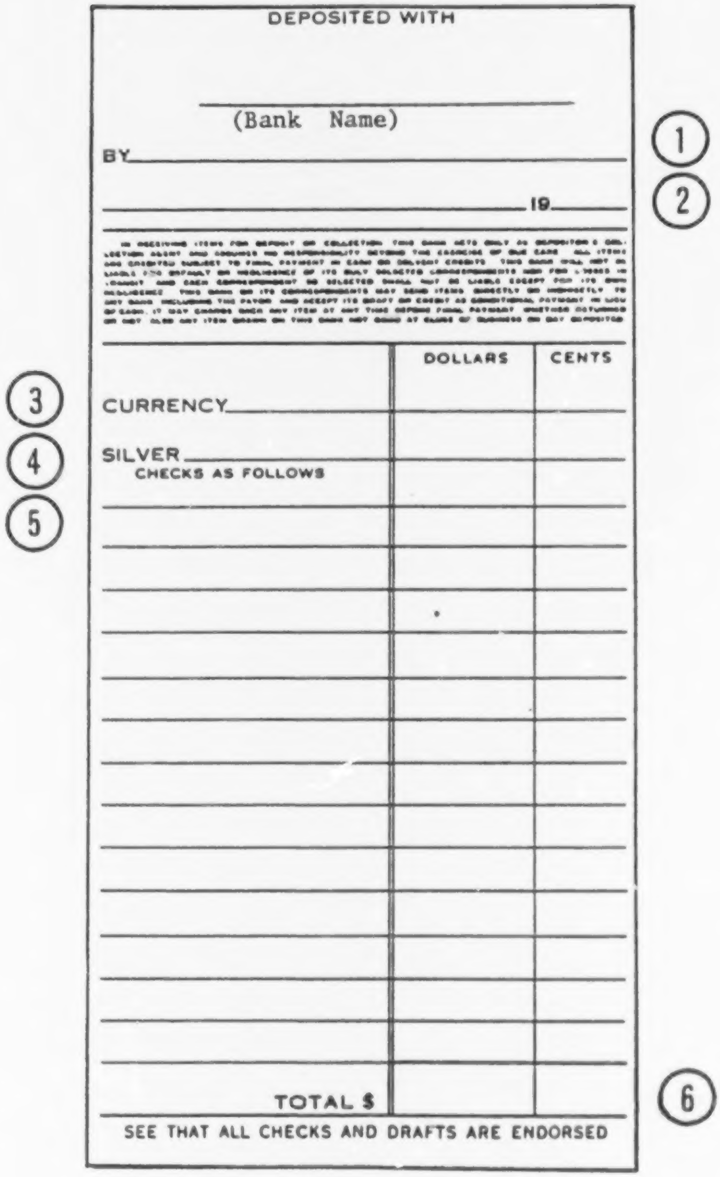
Silver

Checks

Total

BEST COPY AVAILABLE

Bank Deposit Slip



DEPOSITED WITH

____
(Bank Name)

BY____________________

____________________ 19____

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

BEST COPY AVAILABLE

BANK DEPOSIT SLIP ACTIVITY

The following deposits were made by the Boehm Greenhouses in the bank on the following dates. Record them properly on the bank deposit slips and bank deposit tickets:

April 12, 1988:

Currency:

15	$20
18	10
27	5

Checks:

Jim Smith	$ 45.82
Joe Brown	55.63
May Jones	110.62
Gladys Shaw	93.65
George Eich	365.92

April 13, 1988:

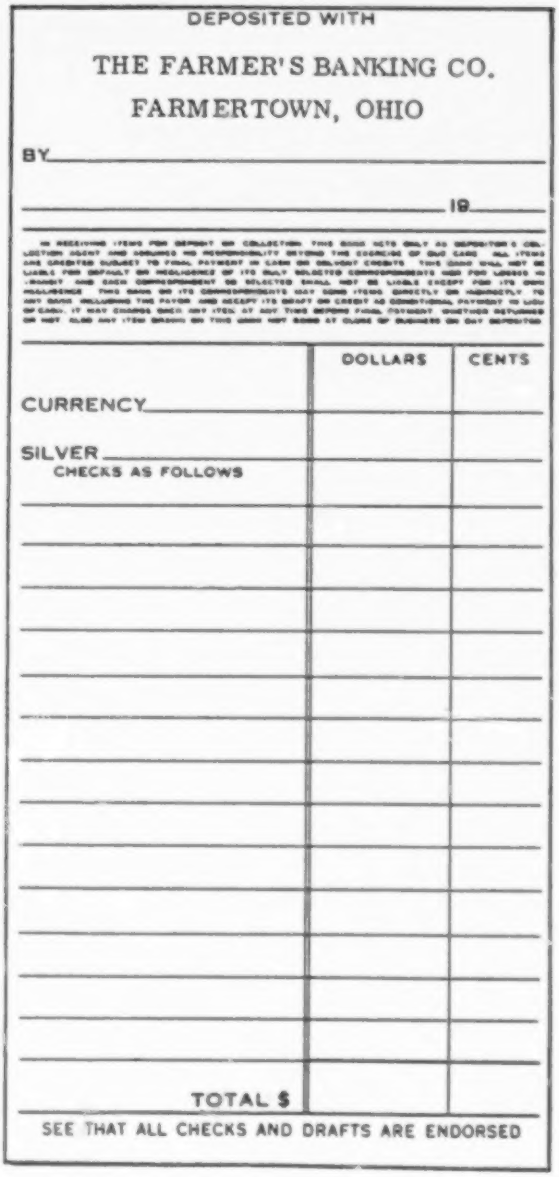
Currency:

35	$20
12	10
42	5

Checks:

William Kamp	$306.72
Harry Kupfer	91.65
George Eib	16.21
Connie Gustafson	171.29
Thomas Jones	133.61

Bank Deposit Slip



DEPOSITED WITH

THE FARMER'S BANKING CO.
FARMERTOWN, OHIO

BY ____________________

____________________ 19____

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

HSS-7

Deposit Ticket

DEPOSIT TICKET

JOHN'S TRACTOR REPAIR
100 Jackson Street
Lebanon, MO 65536

Date ____________________ 19____

Deposited with
FIRST NATIONAL BANK
Lebanon, Missouri

"018866"

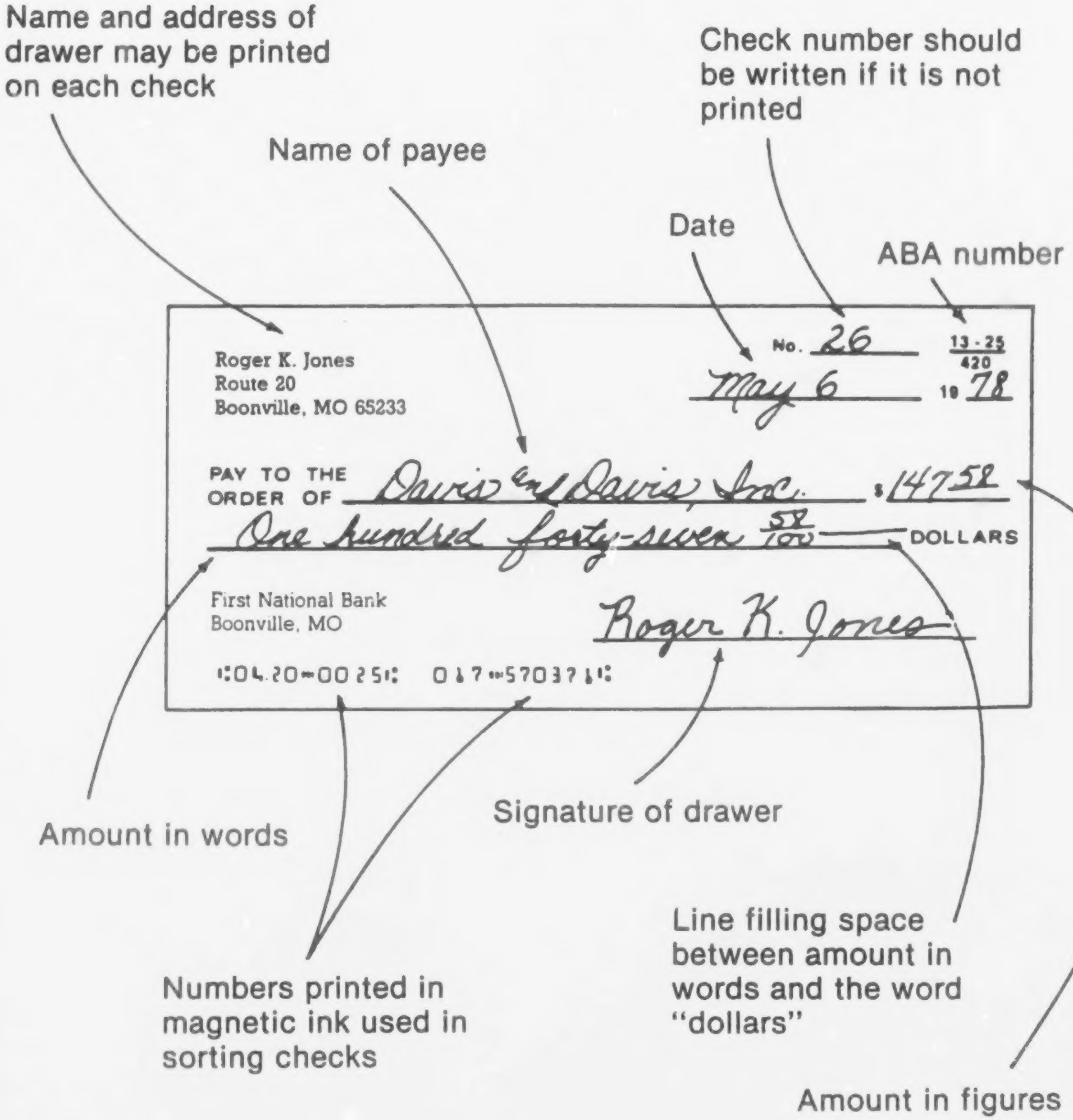
CASH			
CHECKS Endorse And List Each Item			
LESS CASH			
TOTAL			

465

464

ACT-6c

Important Parts of a Check



Name and address of drawer may be printed on each check

Name of payee

Check number should be written if it is not printed

Date

ABA number

Roger K. Jones
Route 20
Boonville, MO 65233

No. 26

13-25
420

May 6 19 78

PAY TO THE ORDER OF Davis and Davis, Inc. $147 58

One hundred forty-seven 58/100 DOLLARS

First National Bank
Boonville, MO

Roger K. Jones

⑆0420⑉0025⑆ 017⑉570371⑈

Amount in words

Signature of drawer

Numbers printed in magnetic ink used in sorting checks

Line filling space between amount in words and the word "dollars"

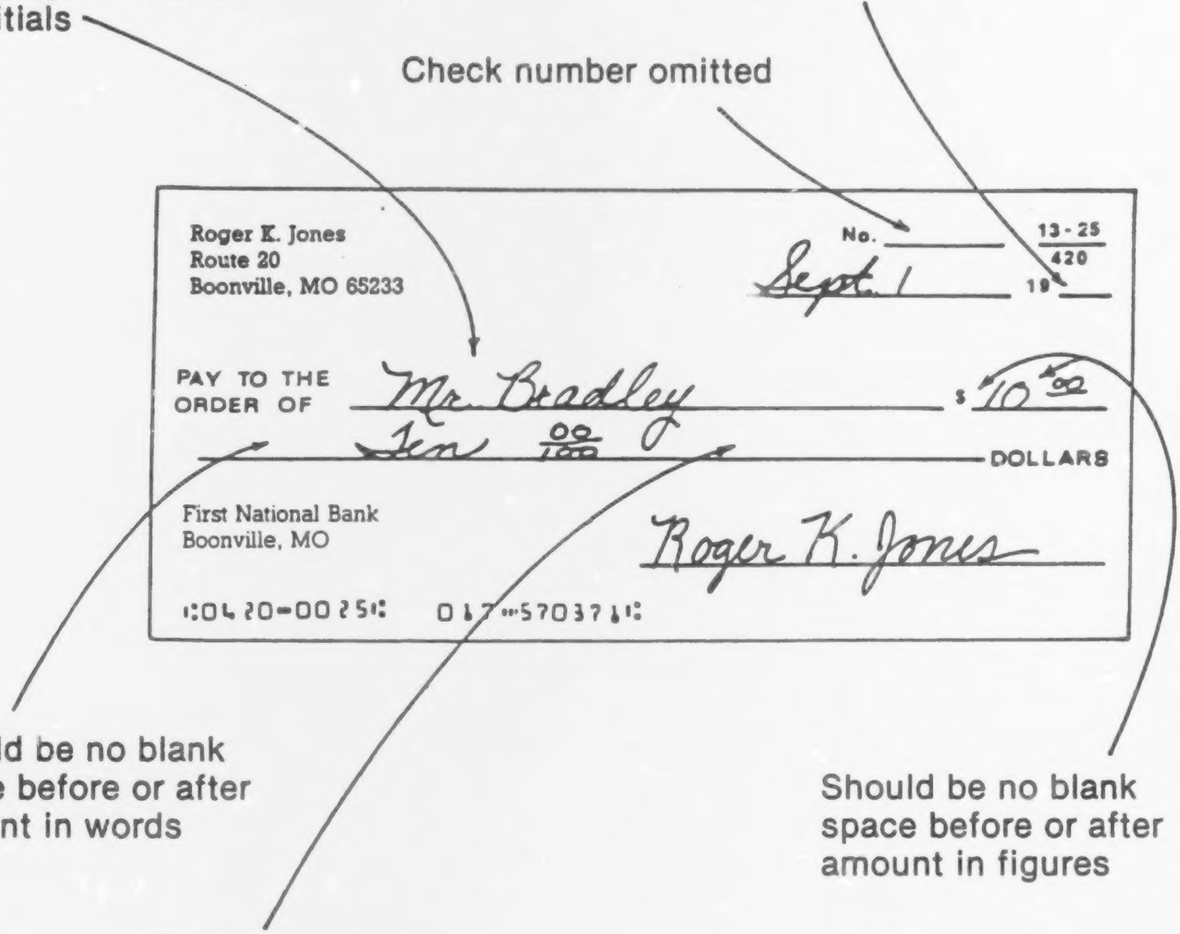
Amount in figures

Some Errors to Avoid in Writing a Check

Title "Mr." is not needed, but name should be complete with given name or initials

Year omitted from date

Check number omitted



Roger K. Jones
Route 20
Boonville, MO 65233

No. ______

13-25
420

Sept. 1 19__

PAY TO THE ORDER OF Mr. Bradley $ 10 00

Ten 00/100 DOLLARS

First National Bank
Boonville, MO

Roger K. Jones

⑆0420-0025⑆ 017⑈570371⑆

Should be no blank space before or after amount in words

Should be no blank space before or after amount in figures

Line should connect amount in words and word "dollars"

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PAYING BY CHECK

You have the following bills to pay and you have decided to pay them by check. You want your cancelled check to serve as proof of payment should the need for such verification arise.

Person or Company to pay	Amount Owed
Earl May Nurseries Shenandoah, Iowa	$ 61.23
Capital City Florists Des Moines, Iowa	93.17
Terril's Landscape Service Charles City, Iowa	367.38
Boone Greenhouses Boone, Iowa	516.21

Using the check forms provided, write out checks to pay these bills.

HOOTERVILLE NURSERIES, INC.
Hooterville, Iowa 33333

SH № 501

Date________________________, 19____

PAY TO THE
ORDER OF____$____________

____DOLLARS

To THE CITIZENS COMMERCIAL BANK

56-542
412

COPY

HOOTERVILLE NURSERIES, INC.
Hooterville, Iowa 33333

SH № 502

Date________________________, 19____

PAY TO THE
ORDER OF____$____________

____DOLLARS

To THE CITIZENS COMMERCIAL BANK

56-542
412

COPY

HOOTERVILLE NURSERIES, INC.
Hooterville, Iowa 33333

SH № 503

Date________________________, 19____

PAY TO THE
ORDER OF____$____________

____DOLLARS

To THE CITIZENS COMMERCIAL BANK

56-542
412

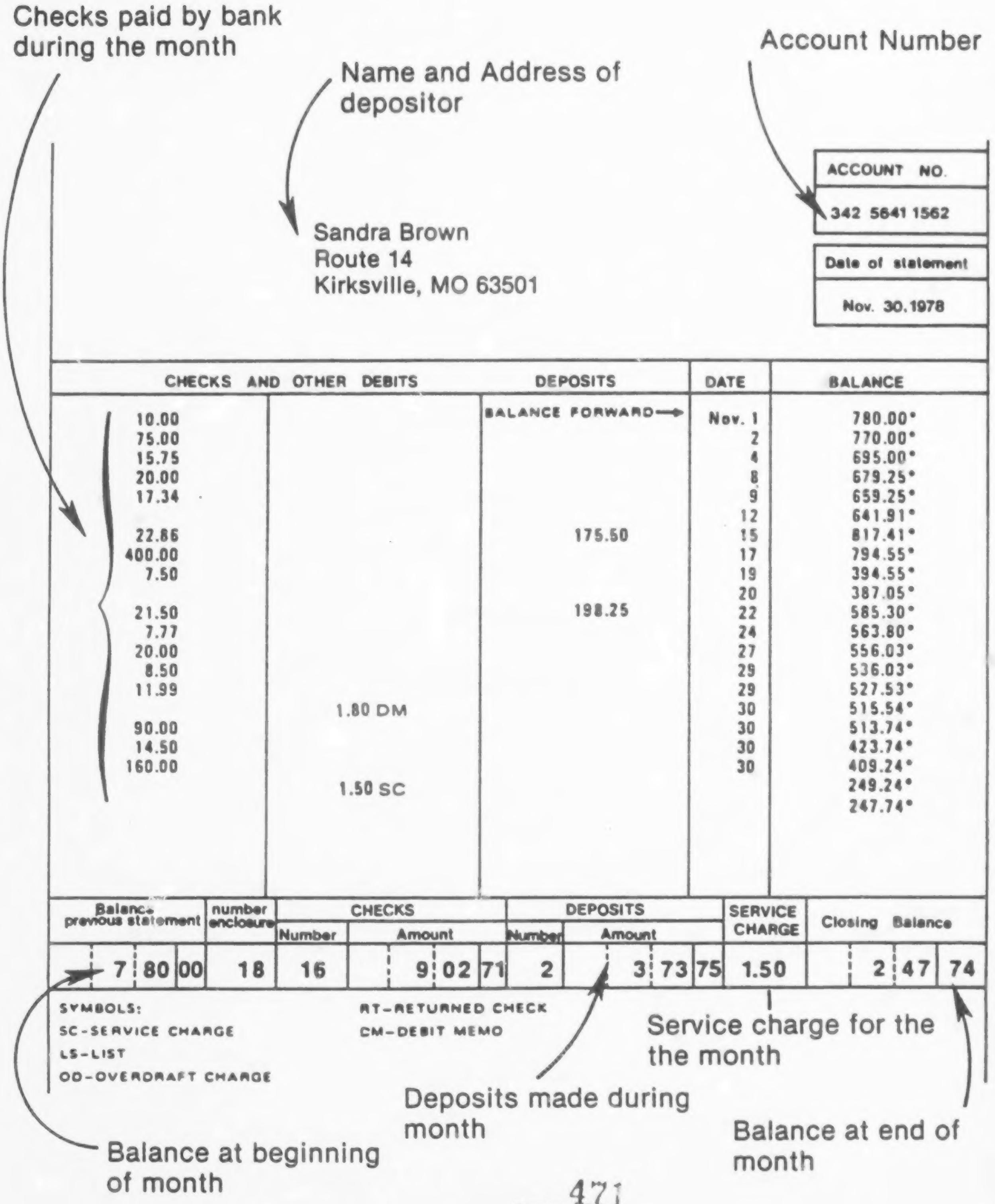
COPY

When Accepting a Check, Look for

- The bank issuing the check
- The date of the check
- Magnetic symbols
- The amount of the check
- Name of the person making the check
- Signature
- Whether the check is for more than the purchase
- Second party checks
- Identification

470

A Bank Statement



Checks paid by bank during the month

Name and Address of depositor

Account Number

Sandra Brown
Route 14
Kirksville, MO 63501

ACCOUNT NO.	342 5641 1562
Date of statement	Nov. 30,1978

CHECKS AND OTHER DEBITS		DEPOSITS	DATE	BALANCE
10.00		BALANCE FORWARD→	Nov. 1	780.00*
75.00			2	770.00*
15.75			4	695.00*
20.00			8	679.25*
17.34			9	659.25*
			12	641.91*
22.86		175.50	15	817.41*
400.00			17	794.55*
7.50			19	394.55*
			20	387.05*
21.50		198.25	22	585.30*
7.77			24	563.80*
20.00			27	556.03*
8.50			29	536.03*
11.99			29	527.53*
	1.80 DM		30	515.54*
90.00			30	513.74*
14.50			30	423.74*
160.00			30	409.24*
				249.24*
	1.50 SC			247.74*

Balance previous statement	number enclosure	CHECKS		DEPOSITS		SERVICE CHARGE	Closing Balance
		Number	Amount	Number	Amount		
7 80 00	18	16	9 02 71	2	3 73 75	1.50	2 47 74

SYMBOLS:
SC-SERVICE CHARGE
LS-LIST
OD-OVERDRAFT CHARGE
RT-RETURNED CHECK
CM-DEBIT MEMO

Service charge for the the month

Deposits made during month

Balance at end of month

Balance at beginning of month

Steps in Completing Credit Card Sales Slip

- Check the name and address on the card
- Check the expiration date
- Check on the validity of the credit card
- Get clearance for large purchases
- Fill out credit slip
- Have customer review and sign charge slip
- Have customer write his/her telephone number on the sales slip.
- Give customer his/her copy of the credit slip
- Tear out and destroy all carbens
- Ring up credit on cash register

USING A CREDIT CARD

You are an employee of the Daily Florist shop. During one of your work days three customers made the following purchases and paid for them with their credit cards. Using the credit card, credit card machine, and credit slips, credit these customers with these purchases:

Purchaser	Item(s)	Amount
Mary Smith	Brass bookends	$33.25
Iguana, Iowa	Centerpiece arrangement	25.00
Larry Schwede	Corsage	$12.50
Pierce, Iowa	Copper vase	17.20
	Potted mum	15.00
Russell Anderson	Roses, long-stem	$24.00
Colo, Iowa	Ceramic birds	7.50
	Potted plant, 2 @ 9.50	19.00

Agricultural Equipment Sales and Service

PROBLEM AREA 1

WHAT HUMAN RELATIONS SKILLS WOULD ONE NEED TO SUCCESSFULLY DEAL WITH PERSONNEL AND CUSTOMERS IN AN AGRICULTURAL EQUIPMENT DEALERSHIP?

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PROBLEM 1: What human relations skills would one need to successfully deal with personnel and customers in an agricultural equipment dealership?

INTEREST APPROACH:

You have been asked to assume the managerial responsibilities of a local agricultural machinery dealership. What are the primary communication techniques you, as the business manager, would need to know in order to effectively deal with personnel and customers of the agribusiness.

STUDY QUESTIONS:

1. What personal skills does an agricultural equipment manager need to effectively deal with employees and customers?
2. What traits must one demonstrate to gain a position of authority and responsibility?
3. What are "work ethics" and how do they contribute to a manager's success in managing an agricultural equipment business?
4. What business systems are agricultural equipment employees expected to know?
5. What should a manager do to encourage the highest level of employee productivity?
6. How should a manager use constructive criticism and why should employees expect to be criticized while on the job?
7. How does a manager effectively communicate with his/her employees?
8. How does a manager stimulate strong customer relations?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To make intelligent decisions. Student Learning Activity #1.

For human relations and communicative skills. Student Learning Activity #2.

For mature intellectual functioning. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve the students' ability to correctly spell words commonly used in writing. Student Learning Activity #4.

Improve the students' ability to write clear, concise, and courteous business letters. Student Learning Activity #4

Improve the students' ability to express his/her opinion in a clear and concise manner. Student Learning Activity #3.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguishing between warranted and unwarranted claims. Student Learning Activity #2.

Distinguishing relevant from irrelevant information, claims, or reasons. Student Learning Activity #3.

Interpretation and evaluation of facts. Student Learning Activity #3.

STUDENT LEARNING ACTIVITIES:

1. Have students list those ethical standards and personality traits, both positive and negative, that would affect on-the-job success. Condense these traits into a fictional "personality type," and assign each to a student to portray. Present these student actors with a specific problem to solve while portraying their assigned personality type. When this role playing activity has been completed, discuss with the class how differently the situation might have been worked out, given a variety of personality types, show TM-1. Pass out and discuss INFO-2a, 2b, 3a, 3b, and 3c. Have students then complete the personality assessment inventory sheet, ACT-4, and have each class member then develop a list of those personal traits that they, as individuals, would like to improve. Pass out and discuss INFO-5.

2. Divide students into small groups of five or less, and match each group with a local agribusiness machinery dealership. Using ACT-6, have each student in the group complete the form by interviewing a member of the management team at their assigned agribusiness. After each group has completed this portion of the activity, discuss how an agribusiness employee should react to constructive criticism. Utilizing INFO-7a through 7e, discuss how a manager should identify and correct employee performance gaps. Have students provide examples and demonstrate how this criticism can be used to one's professional advantage.

3. Discuss non-verbal communication and how it can affect the ability to communicate. Have students site specific instances of times when they, or their fellow classmates might have provided non-verbal messages. Discuss the importance of these non-verbal messages. Have students list some major points or strategies to

keep in mind when handling objectionable customers. Complete ACT-8. Discuss.

4. Discuss the different types of written communications and their importance in an agribusiness. Describe and illustrate the two types of written business communications and discuss the appropriate uses of each. Utilize INFO-9, 10, and 11. Describe a specific circumstance or business situation for students to react to. Have them put their reactions in a rough draft form of a memorandum (example: a memo to a supervisor in regard to employees abusing a privilege or taking advantage of business equipment for their personal use). Pass out INFO-12 and 13. Utilizing these handouts, discuss with students how they might improve their "rough draft communications." Have students make appropriate changes.

CONCLUSION:

Personal skills needed to deal effectively deal with employees and customers.

Needed skills:

Ability to get along with peers.

Ability to get along with customers.

Ability to respond to, and act upon, the desires of superiors.

Identify positive and negative aspects of your personality.

Use personality strengths to your advantage. Make them a "selling feature."

Personality weaknesses can always be improved upon. Devise a plan for improving each weakness.

Observe others and learn from their actions.

As we learn about others, we also learn about ourselves.

To enable us to get along with other people as well as we can.

Most common reason employees are denied promotions:

Approximately 80% of the people who do not receive promotions were denied them because they could not get along with other individuals.

Traits one must demonstrate to gain a position of authority and responsibility.

Ability to get along with others.

Ability to do the job well.

Demonstrate initiative.

Demonstrate reliability.

Honesty/integrity.

"Work Ethics."

"Work ethics" are the basic philosophic principles which determine an employee's attitudes and directs his or her actions. They include:

Quest for knowledge, skill, understanding and appreciation.

Willingness to apply new ideas.

Respect for the personality of fellow workers.

Recognize the right of others to have differing beliefs and actions.

Recognition that teamwork is essential.

Efforts made to understand divergent points of view.

Cultivate a sense of company loyalty.

Assume and carry out responsibility.

Have no part of envy, strife, backstabbing, and jealousy.

Respect authority and order.

Set an example by work.

Self-disciplined and dedicated.

Business systems.

Seniority systems: Based on length of service as an indication of knowledge and proficiency needed for advancement.

Union membership: May or may not be a unionized business; unions have many functions; membership may be optional or mandatory.

Informal vs. formal organization: A proper chain of command and authority will be followed in formal organizations and proper channels may be by-passed.

Encouraging employee productivity.

Treat employees with:

Courtesy and respect.

Leadership.

Asking rather than telling.

Tact.

Do not publicly reprimand subordinates.

Display spirit or enthusiasm.

Encourage employee comments, dependability, and high level of productivity.

Use "constructive criticism."

Verbal communication:

Present ideas by:

Presenting to the right person.

Presenting the idea in simple terms.

Planning your idea and your approach.

Being enthusiastic.

Being patient and persistent (don't give up too soon).

Presenting the idea at a good time.

Being prepared for objection - anticipate questions.

Avoid forcing an idea on co-workers by:

Not pushing for immediate approval.

Knowing that most people have to convince themselves about the idea.

Allowing listeners the time to think your idea through.

Presenting your idea at the right time.

Non-verbal communication.

Conscious action: generally has an obvious meaning (nodding, waving, etc.).

Unconscious action: an action that is not so easy to determine (frown, squint, body language).

May be due to inattentiveness or disinterest.

May be a result of some unrelated origin such as a toothache, distressing news, etc.

People tend to believe the non-verbal message as opposed to the verbal one.

Be aware of your own non-verbal messages.

Make your verbal and non-verbal messages agree.

Using written means of communication to:

Transmit a message whose meaning is clear.

Reveal the writer's personality.

Convey ideas and images to the reader.

An effective written communique includes:

A purpose of the message.

A list of the ideas and facts that will accomplish the purposes.

Two commonly used types of written business communications are:

The formal letter: used to transact business or communicate with strangers or acquaintances.

The memorandum (memo): is a standarized form of communication used to communicate with people within a business; used to easily communicate with co-workers, supervisors, or employees.

Stimulating strong customer relations.

Customer:

Call them by name if you know them.

Be friendly and happy to see them.

Listen to the customer.

Don't argue with the customer.

Thank them for their patronage.

Suppliers:

Treat them like you want your customers to treat you.

Depend on them to supply products for your customers.

Use them as good sources of information.

The four groups of customers that agricultural equipment businesses will be dealing with are:

Prospective clients: found primarily in retail businesses with no specific purchase in mind.

Client: someone with a fairly definite idea of what he or she wants.

Casual visitors: People with no purchases in mind, may not even be shopping; found in all areas of agribusiness.

Clients with complaints: found in all areas of agribusiness.

Supervisors will have definite protocal for handling complaints.

New employees should discuss with their supervisors the steps for handling customer complaints.

Handling objections.

Get a clear understanding of the objection.

Have the objection restated if it is not clear.

Do not interrupt before the customer is finished.

Do not flatly say a customer is wrong.

Point out that they have an interesting viewpoint, however, we could look at it another way.

Agree that you have heard of the objection before.

Restate the customer's objection in your own words in a less negative way. This helps to see if you really understand the problem.

Change the customer's objection into a question, if possible.

Answer the question, or solve the problem, if possible.

Remember, the customer usually just wants to let off steam. Once this is done, the problem is usually easily solved so that both parties are satisfied.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify those personal skills an agricultural equipment manager would need to effectively deal with employees and customers.

Identify those personal traits one would need to gain a position of authority and responsibility.

Define "work ethics" and explain how they contribute to a manager's success in managing an agricultural equipment business.

List those business systems agricultural equipment dealership employees are expected to abide by.

List those things a manager should do to encourage the highest level of employee productivity.

Demonstrate how a manager should use constructive criticism and explain why employees should expect to be criticized while on the job.

Explain how a manager can effectively communicate with his/her employees.

Explain how a manager can stimulate strong customer relations.

Explain how a manager would handle objections from customers and employees.

OPTIONAL LEARNING ACTIVITIES:

1. A field trip through a local agricultural equipment business pointing out the various activities and procedures.
2. Invite a manager or employee from a local agribusiness to speak to the class on the operation of the business.
3. Ask local agribusiness people to speak to the class on what they look for in employees and what new employees should do to gain favorable notice from superiors.
4. Have students describe subordinate work situations and act them out in class. Discuss the right and the wrong methods to handle problem situations.
5. Ask students to formulate a definition for constructive criticism. Write this definition on the board and discuss the distinction between constructive and malicious criticism.

6. Have students discuss various reasons why one might unconsciously provide non-verbal messages.

7. Discuss why it is important to discuss these message and why it is important not to jump to conclusions.

REFERENCES & INSTRUCTIONAL MATERIALS:

Agribusiness Procedures and Records. Lee/Lee. Chapter 1.

Agricultural Business Sales and Marketing, a Curriculum Material. Instructional Materials Laboratory, University of Missouri-Columbia, Columbia, Missouri. June 1984. (Catalog Number AG-51-1.)

Human Relations in Agribusiness. Hillison/Crunkilton. Chapters 7 and 9

Selling in Agribusiness. Miller. Chapter 7.

SUPPLEMENTAL MATERIALS:

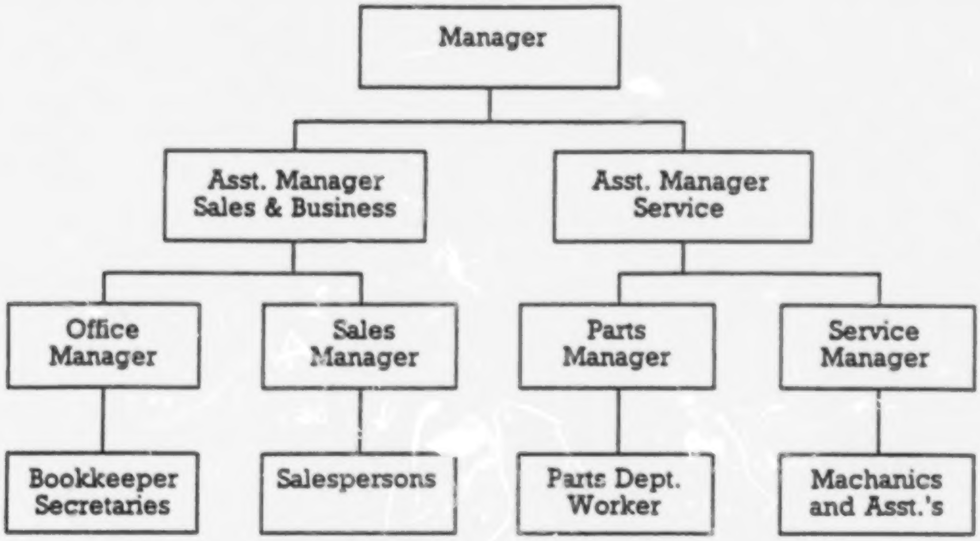
Farm and Ranch Business Management: an Instructional Material. Deere & Company, Service and Training Department, John Deere Road, Moline, Illinois.

LINES OF AUTHORITY

Organizational structure provides ways to communicate between management and workers. The structure also defines who is in positions of authority and this helps keep an agribusiness operating efficiently. The following are examples of organizational stuctures.

1. Line Organization: each worker is responsible to only one supervisor.

   Example: Farm Machinery Dealer


Manager
Asst. Manager Sales & Business
Asst. Manager Service
Office Manager
Sales Manager
Parts Manager
Service Manager
Bookkeeper Secretaries
Salespersons
Parts Dept. Worker
Machanics and Asst.'s

2. Functional Organization: each worker may have more than one supervisor. Supervisors specialize in an area.

   For example: You may have a supervisor in charge of inspection and one in charge of assembly. One assembly worker would have both supervisors.

3. Line-and-Staff Organization: each worker has one main supervisor with special supervisors for specialized areas.

UNDERSTANDING

Ten Rules for Understanding Others

1. Be tolerant of others. Learn to be patient and tolerant of other people's weaknesses. All people are different from you. Simply because a person is a boss, friend, or one to whom you are married does not make that person like you. They are not going to act out the role of boss, friend, or married partner exactly the way you think it should be done. You may not understand why the other person acts like he or she does. But you can learn to tolerate that person and that person's differences from you; that is the beginning of all understanding.

2. Avoid expecting people to be perfect. Have faith in people, believe in them, love them, like them, enjoy them--but accept them the way they are! They come with a lot of good and a little bad; some positive and a little negative; always some plus and always a little minus.

   If you expect people to be perfect you are going to be disappointed. If you are going to understand them it is their negative characteristics you are going to hae to accept and understand.

3. Be sure you WANT to understand people. There are times when you find yourself criticizing another person saying you do not understand why that person acts that way. But perhaps you're finding it easier not to understand that person. Your own negative attitude might be showing through. Perhaps you are envious, suspicious, or simply find it easier to dislike that person. As long as you want to be dominated by your own negative feelings you will never learn to understand others.

4. Look for the good in others.

   It is amazing how deliberately people seem to look for others' negative characteristics. There seems to be a measure of delight in fault finding.

   Make an effort to identify with the positive qualities in people. If you have only positive thoughts of others--you will really have no need for understanding. You have, in a sense, achieved it!

5. Learn to love the unloveable. The personable, popular individual with no irritating qualities presents no challenge to understanding. The challenge is to love the unloveable. It is difficult to understand the people who are rude, sarcastic, arrogant, surly, and self-centered.

   It is difficult to even want to understand these people. It requires self-determination to understand that someone has hurt these people. Someone has made them feel unimportant and unwanted.

   So these are the people who need your understanding. And the reward will be yours for trying. Because, in the process, you will be growing into a genuinely mature person.

6. Hate the thing, not the person. Understanding people does not mean you condone all of their wrongful acts and undesirable characteristics. You will find it easier, however, to create an attitude of understanding, if you restrict your dislike to "the thing" rather than the person. Conceit, greed, cynicism, hate, jealousy, self-pity, and egotism (to name a few) are leeches that affix themselves to individuals to cause misery, sickness, and depression. These you can hate...but have compassion for their victims.

7. Get all the facts. In very few instances would you be irritated with another person if you really knew all the facts. And all the facts include an insight into all inner compulsions, needs, experiences, and the problems of others. Perhaps the saying attributed to the Indians says it best: "Great Spirit, help me never to judge another until I have walked two weeks in his moccasins."

8. Have empathy. You can never perfectly understand people, but you can imagine their feelings. One of the characteristics of your imagination is its ability to place yourself in the other person's situation. You can "imagine" how another feels. And that accomplishes much the same purpose as understanding. It gives a bond of feeling and compassion for others.

9. Control your attitudes. Remember there is usually nothing in the other person's action that irritates you. It is your reactions that cause the negative feelings--the misunderstandings. Learn to control your "reactions"--your attitudes to others--and you will automatically control your feelings.

10. Develop a Mental Image of understanding. Picture yourself as an understanding, patient, kindly individual. Model your picture, if you wish, after an actual person whom you consider having those characteristics. Hold that picture in your mind. Start acting out the image. Soon you will become that person!

11. Use positive affirmations of yourself as an understanding person.

THE TEN COMMANDMENTS OF GETTING ALONG WITH PEOPLE

1. KEEP SKID CHAINS ON YOUR TONGUE. SAY LESS THAN YOU THINK. Cultivate a soothing voice. How you say it often means more than what you say.

2. MAKE PROMISES SPARINGLY AND KEEP THEM FAITHFULLY, no matter what the cost.

3. NEVER LOSE AN OPPORTUNITY TO SAY A KIND WORD TO OR ABOUT SOMEBODY. Praise work well done, regardless of who did it.

4. BE INTERESTED IN OTHERS, THEIR PURSUITS, THEIR HOMES, AND THEIR FAMILIES. Let everyone you meet, however humble, feel you regard that person as important.

5. BE CHEERFUL. KEEP THE CORNERS OF YOUR MOUTH TURNED UP. Hide your worries and disappointments under a smile.

6. KEEP AN OPEN MIND ON ALL DEBATABLE QUESTIONS. Discuss, but don't argue. It is the mark of maturity to disagree and remain friendly.

7. LET YOUR VIRTUES SPEAK FOR THEMSELVES AND REFUSE to discuss the shortcomings of others. Discourage gossip by changing the subject.

8. HAVE RESPECT FOR THE FEELINGS OF OTHERS. WIT AND HUMOR at the expense of a friend is never worth it.

9. PAY NO ATTENTION TO DESTRUCTIVE REMARKS AND PERSONAL INNUENDOS. Live so that no one will believe such comments. Remember, a common cause of backbiting is dissatisfaction with one's self.

10. DON'T BE CONCERNED ABOUT YOUR "JUST DUE." DO A GOOD TURN FOR THE SAKE OF BEING HELPFUL. A false virtue is to "keep quiet, but get even." Instead, one should live by and observe the Golden Rule.

LISTENING TO OTHERS

1. STOP TALKING-- you can't listen while you're talking.
2. EMPATHIZE WITH THE OTHER PERSON--try to put yourself in their place, so that you can see what they are trying to get at.
3. ASK QUESTIONS--when you don't understand, when you need further clarification, when you want to show you are listening. But don't ask questions that will embarrass or belittle.
4. DON'T GIVE UP TOO SOON--don't interrupt the other person; give them time to say what they have to say.
5. CONCENTRATE ON WHAT THEY ARE SAYING--actively focus your attention on their words, ideas, and their feelings related to the subject.
6. LOOK AT THE OTHER PERSON--their face, their mouth, their eyes, their hands, will all help them communicate with you. It helps you concentrate, too. Makes them feel you are listening.
7. SMILE AND GRUNT APPROPRIATELY--but don't overdo it.
8. LEAVE YOUR EMOTIONS BEHIND (if you can)--try to push your worries, your fears, your problems, outside the meeting room. They may prevent you from listening well.
9. CONTROL YOUR ANGER-- try not to get angry at what is being said; your anger may prevent you from understanding the speaker's words or meaning.
10. GET RID OF DISTRACTIONS--put down any papers, pencils, etc., you may have in your hands; they may distract your attention.
11. GET THE MAIN POINTS--concentrate on the main ideas and not the illustrative material; examples, stories, statistics, etc. are important, but usually are not the main points. Examine them only to see if they prove, support, define the main ideas.

12. SHARE THE RESPONSIBILITY FOR COMMUNICATION--only part of the responsibility rests with the speaker; you as the listener have an important part. Try to understand, and if you don't, ask for clarification.

13. REACT TO IDEAS, NOT TO THE PERSON--don't let your reactions to the person influence your interpretation of what he/she says. The ideas may be good even if you don't like the speaker as a person, or the way they look.

14. DON'T ARGUE MENTALLY--when you are trying to understand the other person, it is a handicap to argue mentally as they are speaking. This sets up a barrier between you and the speaker.

15. USE THE DIFFERENCE IN RATE--you can listen faster than the speaker can talk, so use this rate difference to your advantage by: trying to stay on the right track, anticipate what he/she is going to say, think back over what has been said and evaluate carefully. Rate difference: speech rate is about 100 to 150 words per minute; thought speed: 250 to 500.

16. LISTEN FOR WHAT IS NOT SAID--sometimes you can learn just as much by determining what the other person leaves out or avoids in their talking, as you can by listening to what they say.

17. LISTEN TO HOW SOMETHING IS SAID--we frequently concentrate so hard on what is said that we miss the importance of the emotional reactions and attitudes related to what is said. The speaker's attitudes and emotional reactions may be more important than what is said in so many words.

18. DON'T ANTAGONIZE THE SPEAKER--you may cause the other person to conceal ideas, emotions, and attitudes by antagonizing them in any of a number of ways: arguing, criticizing, taking notes, not taking notes, asking questions, not asking questions, etc. Try to judge and be aware of the effect you are having on the other person. Adapt to them.

19. LISTEN FOR PERSONALITY--one of the best ways of finding out information about a person is to listen to them talk; as they talk you can begin to find out what they like and dislike, what their motivations are, what their value system

is, what they think about everything and anything, what makes them tick.

20. AVOID JUMPING TO ASSUMPTIONS--they can get you into trouble in trying to understand the other person. Don't assume that they use words the same way you do; that they didn't say what they meant, but you understand what they meant; that they are distorting the truth because what they say doesn't agree with what you think; that they are lying because they have interpreted the facts differently than you have; that they are unethical because they are trying to win you over to their point of view; that they are angry because they are enthusiastic in presenting their views. Assumptions like these may turn out to be true, but more often they just get in the way of your understanding and reaching agreement or compromise.

21. AVOID CLASSIFYING THE SPEAKER--it has some value, but beware! Too frequently we classify a person as one type and then try to fit everything they say into what makes sense coming from that type of person. She is a Republican; therefore, our perceptions of what she says or means are all shaded by whether we like or dislike Republicans. At times, it helps us to understand people--to know their politics, their religious beliefs, their jobs, etc., but people have the trait of being unpredictable and not fitting into their classifications.

22. AVOID HASTY JUDGMENTS--wait until all the facts are in before making any judgments.

23. IDENTIFY THE TYPE OF REASONING--frequently it is difficult to sort out good and faulty reasoning. Nevertheless, it is so important a job, that a listener should bend every effort to learn to spot faulty reasoning when he hears it.

24. EVALUATE THE FACTS AND EVIDENCE--as you listen, try to identify not only the significance of the facts and evidence, but also their relation to the argument.

25. RECOGNIZE YOUR OWN PREJUDICE--try to be aware of your own feeling toward the speaker, subject, occasion, etc., allow for pre-judgments.

Personality Assessment

Be honest with yourself or have a classmate complete the rating for you. Remember - personality strengths can be used to your advantage and weaknesses can be improved.

Name of Student Being Rated: ______________________________

TRAIT	VERY GOOD	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	POOR
1. Posture					
2. Facial expression					
3. Health					
4. Grooming					
5. Dress					
6. Mannerisms					
7. Speech					
8. Bodily movements					
9. Intelligence					
10. Initiative					
11. Industry.					
12. Dependablility					
13. Enthusiasm					
14. Sincere interest in others					
15. Honesty					
16. Courtesy					
17. Manners					
18. Respect for others					
19. Emotional control					
20. Self-confidence					
21. Integrity					
22. Loyalty					
23. Desire to work					
24. Acceptance of change					
25. Ability to decide					
26. Ability to accept criticism					
17. Tact					
28. Cheerfulness					
29. Alertness					
30. General Knowledge					

TOTAL SCORE ☐

PERSONALITY

How To Be Liked By Others

You will get what you want out of life only if you are able to get along with people. Getting along with others means that they like you and will do things for you. In other words, they react positively to your personality. Your personality is nothing more, nor less than your attitudes in action. It is the way you communicate your thoughts about others and yourself. Here are some pointers to remember to make your personality pleasing, one that creates positive reactions in others:

1. To have a friend, you must be one.
2. The greatest hunger that people have is to be needed, wanted, and loved. Help create those feelings in others.
3. Don't try to impress others. Let them impress you.
4. Be kind to people. You can't always love them, but you can be kind to them.
5. Learn to like yourself. Others will respond to you the way you respond to yourself.
6. Be enthusiastic. Nothing significant was ever achieved without enthusiasm - including deep, rich human relationships.
7. Be positive. Positive people attract others; negative people repel others.
8. Do things to make people feel important. Write a letter. Give a compliment. Say, "Thank You." Praise, Encourage, Support, Cooperate.
9. Sticking up for your "rights" is great, but do you always have to be right? Letting the other person be right once in a while will keep friendships warm.
10. Be a good listener. You can have a greater effect on others by the way that you listen than by the way that you talk.

11. Unless you can say something worthy about a person, say nothing.

12. Call a person by name. Use it often in your conversation.

13. Communicate cheerfulness. Smile. Be pleasant. Talk about the brighter things in life.

14. Avoid arguments.

15. If you're going to make fun of someone, make sure it's you.

16. Help people like themselves. The greatest compliment someone can give you is to say, "I like myself better when I'm with you."

17. Be genuinely interested in others. Get them to talk about themselves. Ask for their opinions, ideas, viewpoints.

MANAGEMENT INTERVIEW QUESTIONS:

1. What personal skills does a manager need in order to effectively deal with employees and customers?
2. What qualities do you look for in potential employees?
3. How do you encourage employee productivitiy?
4. What guidelines do you follow when correcting employee mistakes?
5. What procedures do you use to handle customer complaints?

ANALYZING PERFORMANCE GAPS

Ask yourself...	**Appropriate action...**
What's the matter? What do I expect? What specifically does the employee say/do? What are the results?	Describe the gap in writing
Is expected behavior important? Is it worth my time and effort? Does it affect their performance?	Not Important? IGNORE IT
Is employee aware there is a problem? Does the employee know what is expected? Does employee know that his or her behavior is not satisfactory?	Not aware? GIVE FEEDBACK
Does employee know how to solve it? Does the employee have the necessary skills or knowledge? Has the employee ever performed the task well before?	Doesn't know how? GIVE FEEDBACK TRAIN COACH ARRANGE PRACTICE
Does employee want to do it? Is performance punished? Is nonperformance rewarded? Does performance matter? Are obstacles overwhelming?	Doesn't want to? GIVE FEEDBACK CHANGE CONSEQUENCES REMOVE OBSTACLES COUNSEL MOTIVATE
Does employee have potential? Is employee capable of learning? Is employee suitable for this job? Is it worth your time and effort to solve the performance gap?	No potential? GIVE FEEDBACK REASSIGN* TERMINATE

*You should consider reassigning an employee only if there is a position for which s/he may be suited.

What's the matter?

Before attempting to solve a performance gap, describe it in writing. Be as specific as possible, stating:

1. Management's expectations.
2. The employee's actions.
3. The results.

Unless you can define a problem specifically, you can't begin to solve it. For example, the statement "Pat doesn't sell enough customer labor," is vague. What's enough? Put it in writing:

> Each technician is expected to sell a minimum of 80% of their time. We will be able to charge out 50% of Pat's time the first week and 60% the second week.

Is expected behavior important?

Before spending any more time on a performance discrepancy, ask yourself: Is it worth it? Does this gap affect the employee's performance?

Think of one example of behavior from one of your friends that disturbs you, but, according to the rule of thumb, you should ignore:

Examples of behavior you may need to ignore are:

Matters of personal style or taste - such as favorite foods, clothes, etc.

Leisure or after-work activities that do not affect work.

Personal mannerisms such as the way one laughs, gestures, walk, etc. (None of which you'd probably have any success changing anyway, since these characteristics tend to be deeply ingrained from infancy.)

Lifestyle, values, beliefs that do not reflect poorly on your dealership or its policies.

Is employee aware there is a problem?

Once you are convinced that you are dealing with a genuine performance gap that's important to eliminate, ask yourself the first obvious question: Is the employee aware of it?

Does the employee know what is expected?

Does the employee know that his or her behavior is unsatisfactory?

If, for example, Pat knows that the standard is 80%, but the service manager has never said anything if he made 50% or 60%, Pat may erroneously decide that there is no standard that matters. The key is to GIVE FEEDBACK - specific, immediate feedback.

Does employee know how to solve it?

Assume that there is a performance gap, that it's important, and the employee is aware of it. In solving our concern, we are standing at a very important junction - the split between problems that can be solved through training and those that can be solved through motivation (or changing attitudes).

The key is to answer the question: Does the employee know how to solve it?

Does the employee have the necessary skills or knowledge?

Has the employee ever performed the task well before?

Assume, for example, that Pat used to make the 80% goal. Then, about a year ago, the number began slipping to the current all-time low of 50%. This tells you that Pat has the knowledge and skills required (after all, he used to do it). So, the problem is probably not a skill deficiency that could be solved through training, coaching, and arranging practice. The manager is probably facing an attitude problem.

However, if Pat were a new technician who had no training on the equipment, perhaps a better solution would be to provide training, coaching, and on-the-job practice.

Does the employee want to solve it?

If an employee knows how to do something correctly, but for some reason isn't performing at standard, you are faced with a much tougher problem - the challenge of motivating someone.

Let's briefly look at some of the factors that might influence whether or not someone wants to perform:

Is performance punished?

Is nonperformance rewarded?

Are obstacles overwhelming?

Punishing performance:

Ideally, people should be rewarded for doing something correctly and punished for not performing. But life is more complex than this.

Rewarding nonperformance:

In other cases, nonperformance may be inadvertently rewarded. Assume that after Pat has slipped in time that can be charged out, he begins arriving at the dealership earlier. The service manager compliments Pat on this and gives him more responsibility for helping schedule work (which Pat loves). Pat's nonperformance has been rewarded.

Making performance matter:

Sometimes, management acts as if it didn't matter if an employee performs or not. Assume that the manager ignores Pat's failure to make the 80% standard and gives no feed back. Pat may conclude that it's more important to get to work early than to be efficient on the job.

Ideally, performing correctly would be rewarded, nonperformance punished, and the reward or punishment would be something that the employee cared about.

Overwhelming obstacles:

Sometimes, overwhelming obstacles seem to prevent employees from performing at standard. These could be personal problems, a car that needs repair, marital troubles, a drinking problem that prevents Pat from concentrating on his work. Or, they could be obstacles created by the dealership itself.

For example, suppose the dealer heaped so many different jobs on Pat that he could not become efficient on any of them. The solution to these problems is to remove the obstacles. But this is not always easy, particularly if the cause is beyond the manager's control. Solving performance gaps due to poor motivation can be difficult.

Does employee have potential?

Before you spend all your time and energy solving a performance gap problem, ask yourself: Does this particular employee have potential?

Is employee capable of learning?

Is employee suitable for this job?

Is it worth your time and effort to solve the performance gap?

If not, then you may want to take actions to reassign or terminate the employee.

ARE YOU A GOOD LISTENER?

	Almost Always	Usually	Occasionally	Seldom	Almost Never
ATTITUDES					
1. Do you like to listen to other people talk?	5	4	3	2	1
2. Do you encourage other people to talk?	5	4	3	2	1
3. Do you listen even if you do not like the person talking?	5	4	3	2	1
4. Do you listen equally well whether the person talking is man or woman, young or old?	5	4	3	2	1
5. Do you listen equally well to friend, acquaintance, stranger?	5	4	3	2	1
ACTIONS					
6. Do you put what you have been doing out of sight and out of mind?	5	4	3	2	1
7. Do you look at them?	5	4	3	2	1
8. Do you ignore the distractions about you?	5	4	3	2	1
9. Do you smile, nod your head, and otherwise encourage them to talk?	5	4	3	2	1
10. Do you think about what they are saying?	5	4	3	2	1
11. Do you try to figure out why they are saying it?	5	4	3	2	1
12. Do you try to figure out what they mean?	5	4	3	2	1
13. Do you let them finish what they are trying to say?	5	4	3	2	1
14. If they hesitate, do you encourage them to go on?	5	4	3	2	1
15. Do you re-state what they have said and ask them if you've got it right?	5	4	3	2	1
16. Do you withhold judgment about their ideas until they finish talking?	5	4	3	2	1
17. Do you listen regardless of their manner of speaking and choice of words?	5	4	3	2	1
18. Do you listen even though you anticipate what they are going to say?	5	4	3	2	1
19. Do you question them in order to get them to explain their idea more fully?	5	4	3	2	1
20. Do you ask them what the words mean as they are used?	5	4	3	2	1

If your score is 75 or better, you are a GOOD LISTENER.
If your score is 50-75, you are an AVERAGE LISTENER.
If your score is below 50, you are a POOR LISTENER.

A Sample Agribusiness Letter

ACME Seed and Fertilizer
1800 West 51st Street
Monroe, Alabama 62746
Phone 811-0234

Heading

April 12, 1985

Mr. Charles Pare
Garden Grow Seed Company
1948 Elm Street
Montgomery, Alabama 63811

Inside Address

Dear Mr. Pare:

Salutation

Your company has been suggested as a possible source of garden seed. We are in the process of expanding our varieties of garden seed and are interested in your line of seed.

Would you please have your salesperson call on us at your earliest convenience.

Body

Sincerely,

Complimentary Closing

Jane Jones

Jane Jones
Purchasing Agent

Signature

The Office Memo

MEMORANDUM

To: ______________________

From: ______________________

Subject: ______________________

Date: ______________________

Please note that we have received a shipment of a new brand of equine feed. We are trying to promote the sale of this new brand. As such, please make its availability known to our customers.

Also, take time to familiarize yourself with the advantageous qualities of this new feed.

WHY WRITE? AN OUTLINE OF THINGS TO REMEMBER

I. Reasons for learning to write well

A. To get ideas across accurately

1. For clear understanding
2. To save time
3. To leave a favorable impression
4. To be judged properly

B. To operate a business profitably

1. To make money
2. To secure new business
3. To hold old business
4. To maintain good customer relations
5. To communicate efficiently with all persons within and without the business

II. Writing vs. speaking

A. Likenesses

1. Written language is based on spoken language.
2. Same grammatical rules apply to both.

B. Differences

1. Writing loses the chance to explain further (as is done in speech).
2. Writing is more permanent
3. Writing is more formal.
4. Writing demands the correct and precise use of words.
5. Writing must be brief.

III. The structure of writing

A. Words

1. Know meanings of words you use.
2. Know correct spelling of words you use.
3. Learn to spell and use new words.
4. Learn to spell and use words common in your field.
5. Avoid using too many words.

B. Sentences

1. Write short, concise sentences.
2. Punctuate sentences correctly.
3. Use correct parts of speech

WRITTEN COMMUNICATIONS

Planning the Message

Although the purpose of the written communication is to transmit a message whose meaning is clear, the written communication may also reveal much about the writer's personality. Skillful writers, therefore, plan their communications so that they convey not only the ideas they want to express, but also the image they want to reveal to the reader. To accomplish this dual goal, writers follow a three-step plan.

1. Identify the purpose of the message.
2. List the ideas and facts that will accomplish the purpose.
3. Organize the information.

Identification of the purpose. The first step in planning a successful letter or memo is to identify the reason for writing it. What is the purpose of the message? The answer to this question becomes the central idea of the message. It usually can be written in a few words, or a fragment of a sentence, and serves as a very brief outline for the message.

In business, two forms are commonly used to transmit written communications: the formal letter and the memorandum. The formal letter is the written communication used to transact business or communicate with strangers or acquaintances. The memorandum (memo) is a standardized form of written communication which is used to communicate with people within a business. The memo, therefore, makes it easy to communicate with co-workers, supervisors, or employers.

Listing of the ideas and facts. Next, writers list all the information that is related to the purpose of the communication. They probably will list more information than they will use in the message. To do so is a good technique, for it gives writers the opportunity to examine the relative importance of the material and to choose those ideas and facts that will convey the correct message to the reader.

Organization of information. After listing the facts and ideas that relate to the message, writers number them to indicate the order in which they will use them. They select and present those facts in the following sequence: 1) those facts that direct the interest of the reader to the purpose of the message; 2) those facts that reveal the purpose of the message clearly and concisely, including appropriate explanation of the action to be taken and an expression of feelings of goodwill and understanding.

Preparing a Rough Draft

Once the order of the information to be put into a letter or memo has been identified, it is time to write a rough draft. A rough draft is the preliminary version of the written communication. Beginning writers should press their correct relationships so readers clearly understand and easily follow the writer through one idea to another until they reach the closing.

The Five C's

When the first draft of a letter or memo is completed, read it as if you have never seen it before. With this objective view, evaluate your letter - the reader will. Does the opening catch the reader's interest? Does each sentence and paragraph easily lead the reader to the next? Does the reader clearly understand the purpose of the letter? In short, does the letter reflect the Five C's? They win readers for the writer just as they win listeners for the speaker. Courtesy, correctness, clearness, conciseness, completeness: attention to these Five C's results in a written communication that reflects the image of a writer who is considerate and responsible, who is interested in the reader, and who has something to tell the reader. Here is how the Five C's can be used to evaluate the letter or note.

Courtesy. Courtesy is expressed by phrasing a letter or memo so that its subject matter is discussed from the reader's point of view. The facts should be expressed the way the writer would want to hear them if positions were reversed and he or she were the reader. In a courteous letter, the words "you" and "your" appear more often than "I" and "we," and always with more emphasis on them.

Correctness. The writer tries to meet two criteria for correctness: to tell the truth and to be grammatically and mechanically correct.

Knowing the facts, all the facts, is the writer's responsibility. Writers assemble those facts either before beginning to draft the communication or while drafting it. The writers select for use in the message those facts that explain and complete the purpose of the message. Opinion is less acceptable in writing than it is in oral communication. However, if the writers want to express an opinion in their message, they should label it as such, with an "it is my belief that ...." or an "it may be that ...." or a simple "I think ...."

Because the writer's words, sentences, and paragraphs guide the thinking of the reader, the grammar, spelling, and punctuation must be correct. Grammatical and mechanical errors interrupt the reader's thoughts and break the smooth flow of ideas. Poor grammar may mislead the reader by putting the wrong interpretation on an idea or fact. Incorrect spelling and punctuation also speak in their own dangerous language; "The writer does not know."

A solid education in grammar is an excellent friend for business writers. So is a dictionary. These two are important tools; they help people in a business to express the exact message they want to convey in everything they write.

Clearness. Exactly what do I want to say? Write the answer to this question simply and precisely. Be sure each statement has only one meaning - the meaning you intend to convey. When the thought is clearly stated, it is easily understood. An easily understood message holds the reader's interest.

PROBLEM AREA 2

WHAT FINANCIAL FUNCTIONS WOULD ONE NEED TO KNOW IN ORDER TO SUCCESSFULLY MANAGE AND OPERATE AN AGRIBUSINESS?

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PROBLEM 2: What financial functions would one need to know in order to successfully manage and operate an agribusiness?

INTEREST APPROACH:

You are the owner of an agricultural equipment dealership. During the month of February, just prior to your large spring advertising campaign, your business manager, informs you, without notice, that he/she has accepted another position and will be leaving your employ within the week. You must now assume all financial responsibilities within the business as well as prepare for the upcoming spring sale. What procedures will you use in ordering and receiving inventory, handling cash flow, and issuing credit?

STUDY QUESTIONS:

1. What are the cash flow, credit, and billing procedures/ policies in an agricultural equipment businesses?
2. Why is credit important to the agribusiness?
3. What types of credit/financing are available to the agribusiness itself?
4. How does one manage inventory (ordering of goods) and determine the selling prices of merchandise?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To participate in the planning of one's own activities. Student Learning Activity #1 and 2.

For assurance of economic independence. Student Learning Activity #4.

For personal and emotional independence on an adult level. Student Learning Activity #3.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Teach how to convert units of measure. Student Learning Activity #2 and 4.

Provide instruction on the use of decimals (addition, subtraction, division, multiplication). Student Learning Activity #2 and 4.

Teach how to use simple algebra (determination of unknowns). Student Learning Activity #4.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguishing between verifiable facts and value claims. Student Learning Activity #1.

Develop problem solving skills for making intelligent decisions. Student Learning Activity #3.

Ability to evaluate a situation given a specific set of facts or criteria. Student Learning Activity #3.

STUDENT LEARNING ACTIVITIES:

1. Break students into small groups of three or four. Have them identify five advantages and five disadvantages of an agricultural dealership extending credit to its customers. List these on the board, then brainstorm with students some policies that should be

established by a dealership concerning credit. Discuss the purpose of credit policies. Using ACT-1, discuss the information required on a credit application, as well as those personal and professional factors that need to be considered when determining the ability of individuals to pay their debts. Using TM-2a and 2b, discuss the parts of a credit statement.

2. Define the two main types of inventory. Have students identify what items need to be included in a physical inventory and why. Discuss how and when to replace physical merchandise. Using INFO-3, discuss how the retail prices of merchandise items are calculated. Have the class develop a list of factors that help to determine what the selling price of an item should be.

3. Present student groups with a problem-solving situation in which they have to obtain payment from someone who owes them money. What steps would they take to get payment? Could these same steps be used by an agribusiness to obtain a tractor payment from Farmer John? Have students identify a process for a dealership to use for obtaining payment from customers who have not paid their accounts.

4. Ask students where the profit comes from in an agribusiness. The answer, of course, is from the selling of merchandise or services. This helps explain why careful control over cash records is important to the business. Using TM-4, 5, and 6, discuss the importance of making sure money transactions, documents, and notes are correctly completed.

CONCLUSION:

Handling cash flow:

Credit is defined as:

> The granting or entrusting of a sum of money or something of value (such as goods or services) with the promise of repaying the amount in a certain time period.

The granting of money usually involves a carrying charge after a period of time (generally a percentage of the amount borrowed).

Common terms used when talking about credit:

Creditor: The entity or agribusiness granting credit.

Debtor: The entity or individual that is receiving the credit.

Types of credit offered to customers include:

Revolving credit accounts.

This system is used by loaning institutions and companies issuing charge cards.

Customers usually have two choices: to pay within a certain time period, such as 30 days, and avoid a carrying charge; or to pay in installments, with a charge, until the total amount is paid.

These accounts have a limit set on the total amount that can be charged, but additional purchases can be made before paying off the first purchase.

There are three different methods of figuring the carrying charge (or interest) for this system, each resulting in a different amount. These methods are to be stated in writing by the company or loan institution as required by law.

Previous balance method: Greatest benefit is to the agribusiness. The debtor has to pay interest on the full monthly balance even if partial payment has been made before the billing date.

Unpaid balance method: Greatest benefit is to the customer. The customer receives credit for payments made before the billing date and only pays interest on the unpaid balance.

Average daily balance method: Has become the most used because it has average benefit to debtors and creditors. The interest is charged on the balance divided by the number of days between billing dates.

Conditional sales contracts:

Usually used when making large purchases, for example, a combine or tractor.

The contract commonly involves making a down payment and then making a series of payments over a specific period of time at a designated interest rate.

The agribusiness in the case of buying the combine would retain the title of the combine until the debt was paid in full.

Line of credit:

This is when an agribusiness grants to an individual the privilege of purchasing up to a certain dollar amount without paying immediately.

The amount purchased is then subject to the terms of the line of credit. Terms could include payments with interest, a time period in which the total amount is due (with or without interest), or a specific date for payments.

General agribusiness credit policies include:

Purposes of credit policies are to provide maximum profit for the agribusiness, and to make sure the credit agreement is understood by all parties involved.

Terms of sale:

Amount of time the debtor has to pay for goods and if the buyer is late in payment, what the penalties are.

Determining credit eligibility is based upon an established set of standards which determine a point of ineligibility for customers applying for credit.

Limitations on credit are established on how much customers can charge. These limits depend on criteria such as the past history of their account and their financial base.

Procedures for collection are established to set a pattern for the agribusiness to follow and to help encourage customers pay on time.

Written agreements:

These are most common on large purchases.

Promissory notes are the most used written agreement. It spells out the place, the time period involved, method of payment, the interest rate, and is signed by the buyer or maker.

Security:

Secured loans are those that are backed with collateral, an asset that belongs to the debtor. The creditor has a lien on the collateral, which is a right to recover the amount of the unpaid loan with that collateral. These are not commonly used in agribusiness.

Unsecured loans do not require collateral and are the ones most commonly used in agribusiness.

Credit standing is the ability of consumers to pay their debts. The following is a list of criteria used to evaluate an individual's credit standing:

Assets or capital the individual owns. This includes money in savings, income and tangible items such as cars, land, livestock, buildings, etc.

The character of the individual: honesty, responsibility, moral, and the history of repaying debts.

The business ability or capacity of an individual which is measured by the person's current enterprise or employment.

Condition of the individual's ranch or farm compared to existing economic conditions. For example, if the person is a dairy farmer and milk prices have been going down, it would not be a good time to offer a loan to increase the herd size.

Where does the agribusiness get credit information about the consumer?

Credit application form.

Other creditors the individual may owe.

The individual's employer.

Personal interview; this includes looking over the individual's farm or ranch if he/she has one.

Contact the credit bureau for a rating

Laws concerning credit buying:

The Federal Equal Credit Opportunity Act protects a consumer from being discriminated against because of sex or marital status.

The Federal Consumer Credit Protecton Act of 1968 (Truth in Lending Act):

The law applies to credit that does not exceed $25,000 and to all real estate transactions, no matter what the amount.

The law states that a copy of the terms and conditions of credit agreements be given to the applicant. This information is usually given in what is called disclosure statement. The following is a list of information which must be provided.

The law also states that customers have the right to cancel their credit agreement within three business days of signing the agreement.

If there is a dispute about the bill, the debtor must write to the creditor explaining the problem. The creditor must answer in 30 days.

Billing procedures used:

Customers generally await statements before they make payments. That is why it is important for agribusinesses to have a regular schedule of sending out statements.

Many agricultural equipment dealerships use farm payment billings. This is when the bank used by the dealership sends billing statements directly to dealership customers. The dealership, therefore, is relieved of this responsibility.

A statement should contain the following information:

Date of each item purchased.

Description of items purchased.

Purchased quantity.

Price.

Total amount due.

Date payment is due.

Terms.

Address of where payment is to be sent.

How to handle delinquent accounts:

Late payments are detrimental to an agribusiness because money tied up in late payments can't be used to operate the business.

Show TM-8.

Collection of delinquent accounts.

The actual collection of delinquent accounts is expensive and worth less and less as time goes by.

A good system of keeping track of accounts and following up quickly on overdue accounts is essential.

The following is a list of steps that most agribusinesses follow in making collections:

Usually, after an account is 30 days overdue, phone calls and letters are the first step.

The second step is a personal visit by an employee, usually the credit manager. This visit should be conducted with discretion in trying to get the payment and still keep the customer. If payment is still not received, a schedule for payments should be agreed upon.

The next step is hiring a collection agency.

The final step is to have an attorney file a lawsuit. This is only used on large accounts because of the expense.

The best method for avoiding delinquent accounts is to have a good policy in evaluating a customer's credit standing, so that bad credit risks can be avoided from the start.

Cash receipt and payment records:

What are cash, cash receipts, and payments:

Cash: Includes currency, coins, checks, and money in the bank account.

Cash receipts: Money received by the agribusiness from sales.

Cash payments: Money paid out by the agribusiness.

Why must careful consideration be given to cash records?

To keep an accurate account of cash flow.

To prevent loss or theft.

To prevent the misuse of money by employees.

To help managers make accurate decisions about paying debts, buying items, and expanding.

Importance of credit:

Advantages of offering credit to customers:

Customers make larger purchases than they can pay for immediately, which encourages sales.

Establishing credit ratings for customers promotes their return for future purchases.

Convenient for customers to make purchases without having to go elsewhere for a loan. This promotes loyalty and good will toward the agribusiness.

Credit allows customers to buy during seasons when they are low on operating capital. This helps spread selling out over the year.

Credit helps individuals expand their farm or ranch, which in turn, helps the agribusiness through more potential sales.

Easier for customers to pay the account later with a check than to carry a lot of cash.

Disadvantages of offering credit to customers:

Increases paperwork at an agribusiness, which creats additional costs because of the time and labor involved.

Losses occur because of bad debts (uncollectable accounts).

Ties up operational money of the agribusiness.

Offering credit causes agribusinesses to raise prices of products and services to cover these extra costs. This in turn may cause consumers who buy with cash to go elsewhere. (Sometimes cash discounts are offered to offset this disadvantage.)

Types of credit available to agribusinesses:

Commercial credit: Short term loans made to businesses for quick repayment.

Bank credit: A bank adds the proceeds of a loan to the account of a depositor. The borrower then writes checks on the account.

Investment credit: These types of loans are made to agribusinesses for real estate, equipment, or buildings which will be used for a long period of time.

Open account credit: Similar to a line of credit for customers, but this is between businesses. Businesses are sold goods and given a specific amount of time before they must repay the loans.

Inventory:

What is inventory:

The quantity of merchandise (whether raw or finished) in the agribusiness' possession.

The inventory can include both products and fixtures or machines.

Perpetual inventory:

The process of keeping a daily record of items received and shipped. This record is kept in writing on paper, computer disk, or other retrievable source.

Sometimes called the balance-of-stores record.

The record usually includes the following information:

Description of items.

When more should be ordered.

Quantity to be ordered.

Dates on which inventory changed.

Quantity of changes.

This type of inventory helps to keep agribusinesses informed of exactly what inventory is on hand.

The main disadvantage is that it does not show losses from theft and damage.

Physical inventory:

Taking an actual count of the inventory on hand.

Done at regular intervals (quarterly).

Gives an accurate account of what is on hand.

Needed for tax and insurance purposes.

The main disadvantage is that it takes time and disrupts regular business.

Control of inventory (to keep the right amount of goods on hand).

The following are considertions that managers use to control inventory:

Have what customers want.

Buying too much will tie up needed operating money.

Seasonal demands.

Past inventory records.

Trends in supply and demand.

What is currently in stock.

Inventory control is closely related to profitability of an agribusiness and is dependent on the following:

Purchasing: Which is dependent on how much is needed or can be sold.

Production: How many supplies you need to create goods and services.

Storage: Limited by the storage available for items.

Marketing: What potential sales are expected to be.

Financing: Large inventories tie up many dollars.

Taking a physical inventory:

Inventory everything owned by the agribusiness.

Taxes and insurance amounts are based on physcial inventory.

The inventory usually involves all the personnel in counting and recording items.

Replacing inventory:

Ordering:

Need to order the amount of material or products which can be used or sold before it deteriorates or becomes out of date.

Telephone ordering is usually used when items are needed immediately and should be followed up by a written order. Telephone order (immediate orders) cost the dealership more money than bi-monthly orders. Pre-season or quarterly orders are the lowest in cost.

Some orders are given to salespeople who call on the agribusiness.

The most accurate way to place orders is through a written purchase order with carbon copies. One is sent to the supplier, the other is retained to check the order when it arrives.

Receiving:

Counting the items received and checking against the original purchase order.

Inspecting the condition of the merchandise and making sure that any discrepancies are reported within the specified time limit..

Three different types of reports may be used in receiving:

Receiving report: Used internally by large agribusinesses to check the type, condition, and the quantity against the purchase order.

Bill of lading: Accompanies the carrier and indicates what the carrier had when it left the point of origin.

Invoice: A record from the supplier describing what was shipped and includes the agribusiness' purchase order number.

Determining the selling price of merchandise: is important to remain in business. The price of products must be marked up to recover costs and allow for a profit.

Factors that determine selling price:

The wholesale costs or how much the agribusiness paid the supplier for products and materials.

Freight charges.

The wholesale and freight costs usually add up to 80% of the selling price.

Overhead costs that are absorbed in selling prices:

Profit lost from merchandise becoming outdated.

Purchase price of items from suppliers drop before the old (higher-priced) inventory is sold.

Interest charges.

Storage costs.

Deterioration and damage of merchandise.

Theft.

Wages of employees.

Taxes.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify the procedures involved in handling the cash flow of the agribusiness.

Explain how one manages inventory (ordering of whole goods) and determine the selling price of merchandise.

Define financing, and explain why it is important to the agribusiness, and list the various aspect of it.

OPTIONAL LEARNING ACTIVITIES:

A field trip through a local agribusiness pointing out the various activities and procedures.

Invite a manager or employee from a local agribusiness to speak to the class on the operation of the business.

REFERENCES AND INSTRUCTIONAL MATERIALS:

Agribusiness Procedures and Records. Lee/Lee. Chapter 1.

Transparency Master, TM-2, Primary Business Activities

Agricultural Business Sales and Marketing: a Curriculum Material. Instructional Materials Laboratory, University of Missouri-Columbia, Columbia, Missouri. June 1984. Catalog Number AG-51-1

SUPPLEMENTAL MATERIALS:

Farm and Ranch Business Management: an Instructional Material, Deere and Company, Service and Training Department, John Deere Road, Moline, Illinois 61265

(Closed End)

CREDIT APPLICATION

(Secured/Unsecured Credit)

IMPORTANT: Read these Directions before completing this Application.

☐ If you are applying for individual credit in your own name and are relying on your own income or assets and not the income or assets of another person as the basis for repayment of the credit requested, complete only Sections I and IV. If the requested credit is to be secured, also complete the first part of Section III, and Section V.

☐ If you are applying for joint credit with another person, complete all Sections except V, providing information in II about the joint applicant. If the requested credit is to be secured, then complete Section V.

☐ If you are applying for individual credit, but are relying on income from alimony, child support, or separate maintenance or on the income or assets of another person as the basis for repayment of the credit requested, complete all Sections except V to the extent possible, providing information in II about the person on whose alimony, support or separate maintenance payments or income or assets you are relying. If the requested credit is to be secured, then complete Section V.

Amount Requested $	Proceeds To Be Used For What Purpose	Account Number

SECTION I — INFORMATION REGARDING APPLICANT

Full Name (Last, First, Middle)	Telephone Number	Date of Birth	Social Security Number
Present Address (Street/City/State/Zip)		Years There	Ages of Dependents

Previous Address (Street/City/State/Zip)	Years There

Present Employer (Name and Address)	Telephone Number	Years There

Position or Title	Immediate Supervisor	Present Gross Salary $ Per	Present Net Salary $ Per

Previous Employer (Name and Address)	Years There

Checking Account Number ______________ Institution Name ______________

Savings Account Number ______________ Institution Name ______________

Have You Ever Received Credit From Us? ☐ No ☐ Yes, When?

Do You Anticipate Any Income Reported In This Section To Be Reduced Prior To The Credit Requested Being Paid Off? ☐ No ☐ Yes (Explain)

Nearest Relative (Not Living With You)	Address	Relationship	Telephone Number

Alimony, Child Support, or Separate Maintenance Need Not Be Revealed If You Do Not Wish To Have It Considered As A Basis For Repaying This Obligation.

Other Income $ Per	Sources of Other Income

SECTION II — ASSETS

If Section II Has Been Completed, Indicate All Assets And Debts of Joint Applicant By Marking A "J" Next To The Value or Present Balance.

ASSETS OWNED

DESCRIPTION	VALUE	SUBJECT TO DEBT		OWNERS NAME(S)
		YES	NO	
Cash	$			
Make, Model, Year of Automobile(s)				
Face Value and Issuer of Life Insurance Policy				
Location and Years Owned of Real Estate				
Issuer, Type and No. of Shares of Securities				
Miscellaneous Assets (Please List)				
Total Assets				

SECTION III — SECURED CREDIT (Give Brief Description of Property To Be Used As Security)

Property Description

Name and Address of Co-Owners

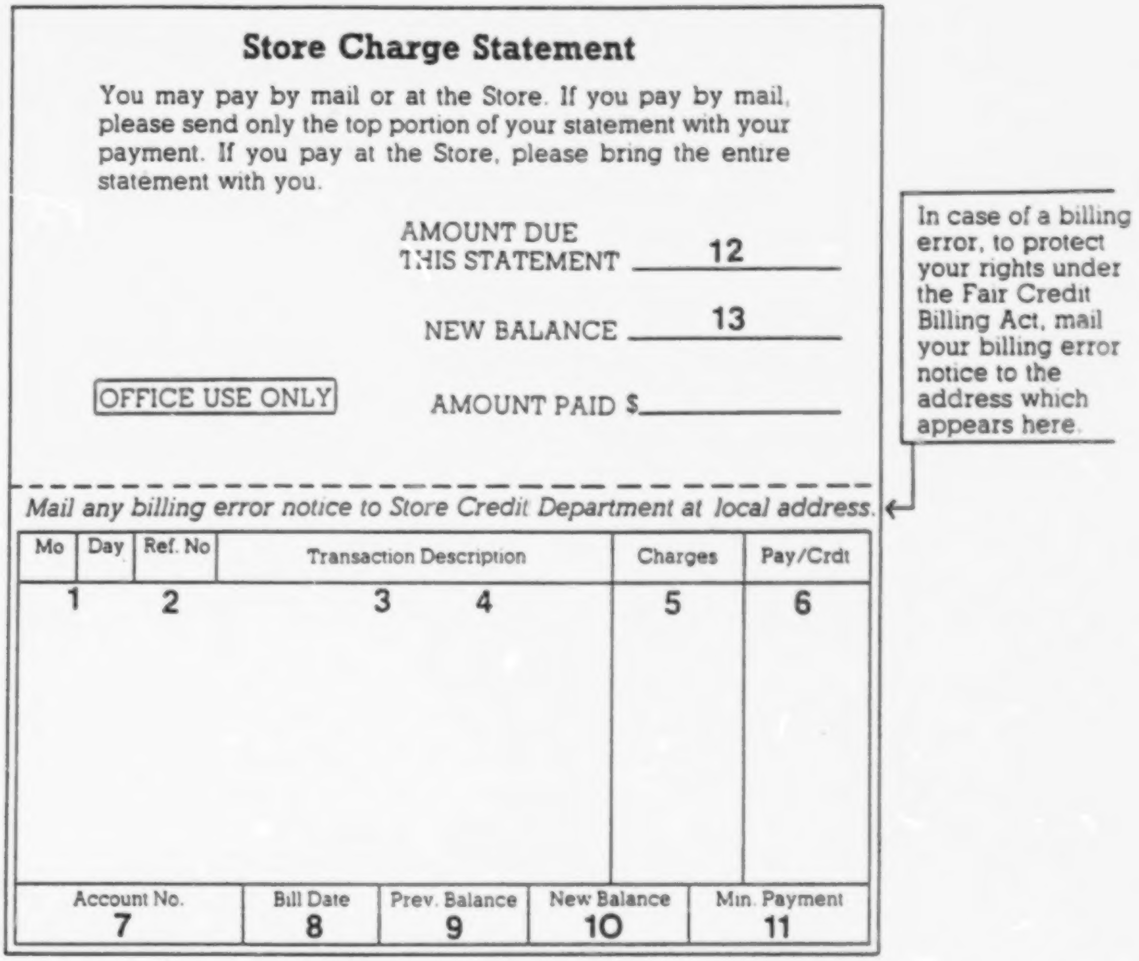
SIGNATURES

I/We hereby certify that the foregoing statements are true and complete to the best of my/our knowledge and that they are made for the purpose of determining my/our eligibility for credit.

I/We understand that you will retain this application whether or not it is approved. You are authorized to make any and all inquiries you deem necessary to verify the accuracy of the statements made herein.

APPLICANT'S SIGNATURE DATE APPLICANT'S SIGNATURE (If Applicable) DATE

Credit Statement



Store Charge Statement

You may pay by mail or at the Store. If you pay by mail, please send only the top portion of your statement with your payment. If you pay at the Store, please bring the entire statement with you.

AMOUNT DUE THIS STATEMENT 12

NEW BALANCE 13

OFFICE USE ONLY

AMOUNT PAID $________

In case of a billing error, to protect your rights under the Fair Credit Billing Act, mail your billing error notice to the address which appears here.

Mail any billing error notice to Store Credit Department at local address.

Mo	Day	Ref. No	Transaction Description	Charges	Pay/Crdt
1		2	3 4	5	6

Account No.	Bill Date	Prev. Balance	New Balance	Min. Payment
7	8	9	10	11

TRUTH IN LENDING: Here you will find disclosures regarding the Annual Percentage Rate of Finance Charge applicable to your account.

1. DATE
2. REFERENCE NUMBER
3. TRANSACTION DESCRIPTION
4. DEPARTMENT NUMBERS
5. CHARGES
6. PAYMENTS AND CREDITS
7. ACCOUNT NUMBER
8. BILLING DATE
9. PREVIOUS BALANCE
10. NEW BALANCE
11. MINIMUM PAYMENT
12. AMOUNT DUE
13. AMOUNT PAID

FIGURING THE SELLING PRICE OF MERCHANDISE

For any agribusiness to remain in business they must price merchandise from their inventory to recover costs and add in enough for a profit. Profit is not a dirty word, it is that amount of money that is received by the businesses for the products and services they provide.

Most employees will not be involved in the actual pricing of merchandise, however, recognizing how prices are established will help the employee answer questions concerning prices. There are many costs that are reflected in the selling price of merchandise. These costs can be divided into three main types. The first, wholesale cost, is the amount the agribusiness paid the supplier for the merchandise. The second one, freight costs, are simply those charges incurred by shipping merchandise. The third one, overhead costs, are all those costs incurred by the company to get that merchandise from the receiving dock to the consumer.

Overhead costs include loss from outdated merchandise; purchase price of items drop but the agribusiness has a large inventory of that item at the higher purchase price; interest charges; storage costs; deterioration and damage; theft; wages of employees; and taxes. The wholesale and freight costs are considered separate from the overhead costs and usually add up to 80% of the sales price.

Markup is the overhead costs and profit added together and is usually represented as a percentage of the wholesale and freight costs. Selling prices are calculated by adding the markup to the wholesale and freight costs. There are different markups for different types of merchandise depending on its value and the overhead costs involved. The following is an example of how selling prices are figured:

Wholesale and Freight costs for a Shovel	$5.00
Markup for hand tools is	50%

To figure markup multiply $5.00 x .50 = $2.50
To figure selling price add $2.50 x $5.00 = $7.50

TM-4

Deposit Ticket

DEPOSIT TICKET

JOHN'S TRACTOR REPAIR
100 Jackson Street
Lebanon, MO 65536

Date ______________________ 19____

Deposited with
FIRST NATIONAL BANK
Lebanon, Missouri

"018866"

CASH			
CHECKS Endorse And List Each Item			
LESS CASH			
TOTAL			

Checks and other items are received subject to the regulations of this bank.

AE-2

Important Parts of a Check

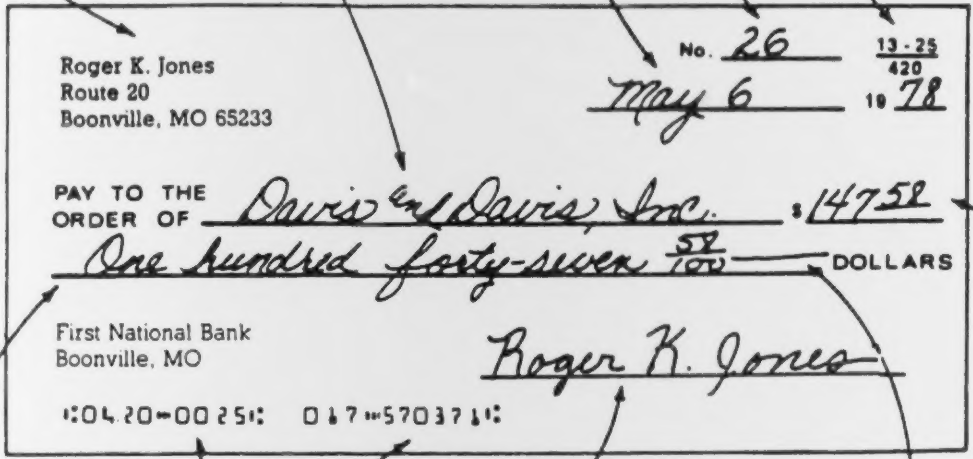
Name and address of drawer may be printed on each check

Check number should be written if it is not printed

Name of payee

Date

ABA number



Roger K. Jones
Route 20
Boonville, MO 65233

No. 26

13-25
420

May 6 19 78

PAY TO THE ORDER OF Davis and Davis, Inc. $ 147 58

One hundred forty-seven 58/100 DOLLARS

First National Bank
Boonville, MO

Roger K. Jones

⑆0420⑉0025⑆ 017⑉570371⑈

Amount in words

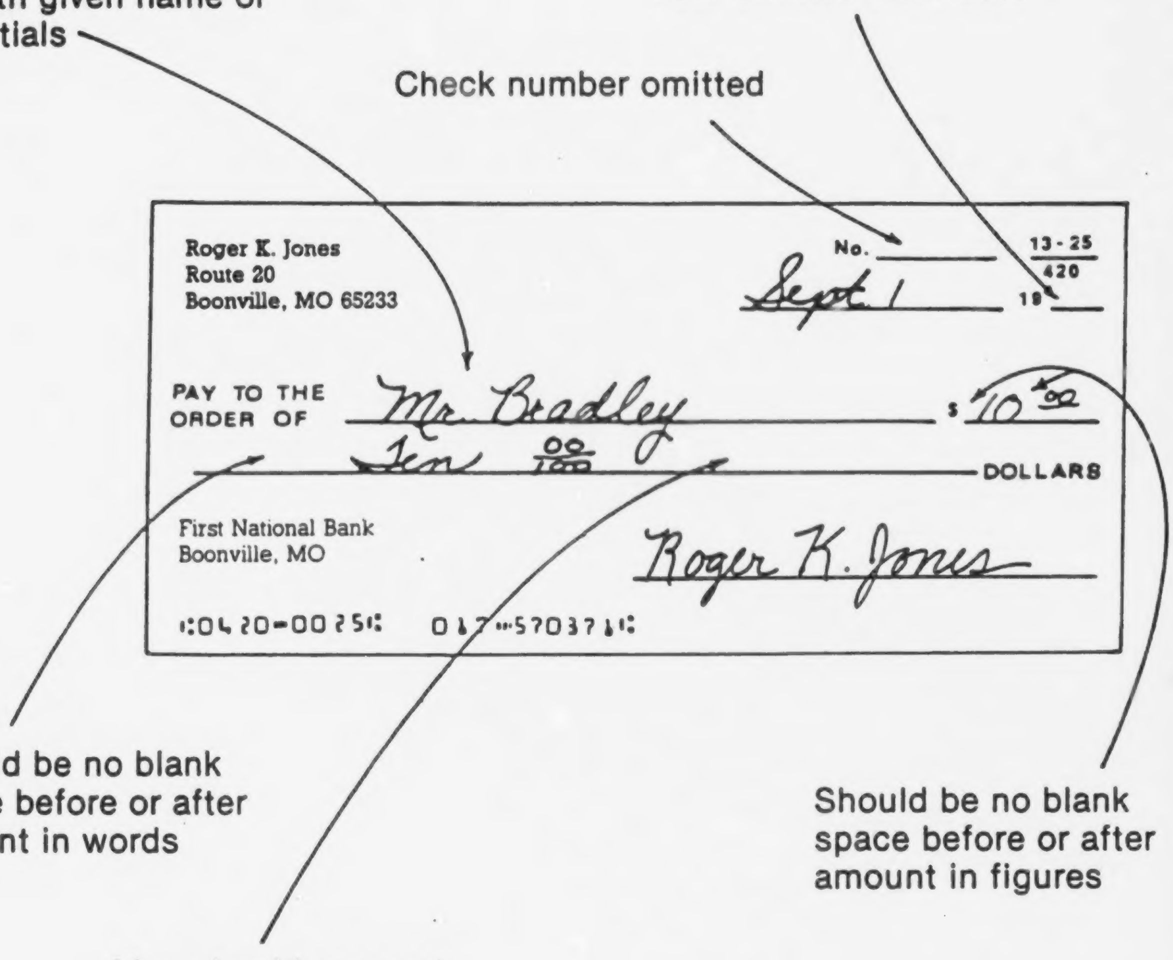
Signature of drawer

Line filling space between amount in words and the word "dollars"

Numbers printed in magnetic ink used in sorting checks

Amount in figures

Some Errors to Avoid in Writing a Check



Roger K. Jones
Route 20
Boonville, MO 65233

No. ______ 13-25/420

Sept. 1 19__

PAY TO THE ORDER OF Mr. Bradley $ 10 00/xx

Ten 00/100 DOLLARS

First National Bank
Boonville, MO

Roger K. Jones

⑆0420-0025⑆ 017⑈570371⑆

Title "Mr." is not needed, but name should be complete with given name or initials

Year omitted from date

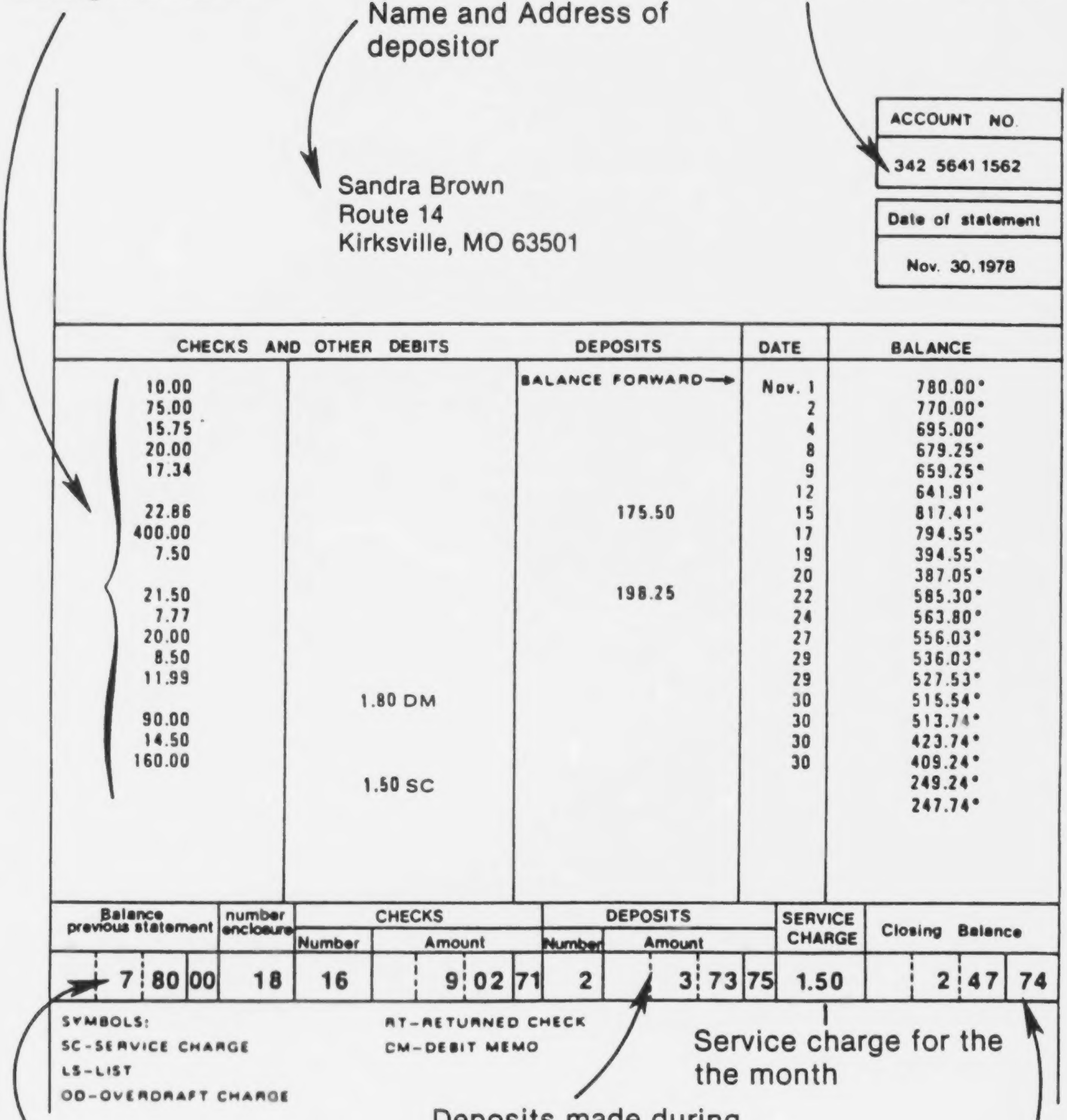
Check number omitted

Should be no blank space before or after amount in words

Should be no blank space before or after amount in figures

Line should connect amount in words and word "dollars"

A Bank Statement



Checks paid by bank during the month

Name and Address of depositor

Account Number

Sandra Brown
Route 14
Kirksville, MO 63501

ACCOUNT NO.
342 5641 1562
Date of statement
Nov. 30, 1978

CHECKS AND OTHER DEBITS		DEPOSITS	DATE	BALANCE
10.00		BALANCE FORWARD →	Nov. 1	780.00*
75.00			2	770.00*
15.75			4	695.00*
20.00			8	679.25*
17.34			9	659.25*
			12	641.91*
22.86		175.50	15	817.41*
400.00			17	794.55*
7.50			19	394.55*
			20	387.05*
21.50		198.25	22	585.30*
7.77			24	563.80*
20.00			27	556.03*
8.50			29	536.03*
11.99			29	527.53*
	1.80 DM		30	515.54*
90.00			30	513.74*
14.50			30	423.74*
160.00			30	409.24*
	1.50 SC			249.24*
				247.74*

Balance previous statement	number enclosure	CHECKS		DEPOSITS		SERVICE CHARGE	Closing Balance
		Number	Amount	Number	Amount		
7 80 00	18	16	9 02 71	2	3 73 75	1.50	2 47 74

SYMBOLS:
SC-SERVICE CHARGE
LS-LIST
OD-OVERDRAFT CHARGE
RT-RETURNED CHECK
CM-DEBIT MEMO

Service charge for the the month

Deposits made during month

Balance at beginning of month

Balance at end of month

Dollar Losses From Overdue Accounts

The following chart shows what happens to the value of one dollar in delinquent accounts:

The Dollar's Worth	Time In Months / Years
.90	3 mos.
.50	6 mos.
.30	1 yr.
.23	2 ys.
.15	3 ys.
.01	5 ys.

PROBLEM AREA 3

WHAT IS THE NATURE OF PROMOTION AND ADVERTISING IN AN AGRICULTURAL EQUIPMENT BUSINESS?

Contents

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ACT-2 Newspaper Ad Evaluation....................21

TM-3 An Advertising Campaign Should Include....................22

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TM-6 Types of Advertising Media....................25

TM-7 When Preparing Newspaper Ads....................26

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PROBLEM 3: What is the nature of promotion and advertising in an agricultural equipment business?

INTEREST APPROACH:

Your boss has just placed you in charge of coordinating the spring promotional campaign for the equipment dealership. Not only are you responsible for developing ads and displays, but also for determining the most appropriate methods of advertisement to be used as well as the most effective media sources. How are you going to approach this responsibility, and what techniques and resources will you utilize in order to make this a successful promotion for the business?

STUDY QUESTIONS:

1. What is the value of promotion in agriculture?
2. How is advertising used in agribusiness?
3. What are the different types of advertising media?
4. How do you design agribusiness displays?
5. How do you construct displays?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

For cooperation with others in reaching a common goal. Student Learning Activity #3 and 4.

To use human relation and communicative skills in social interaction. Student Learning Activity #2.

For independent thinking with less need for models. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Strengthen the students' ability to follow oral and written instructions. Student Learning Activity #3.

Provide instruction on interpreting and using graphs and tables. Student Learning Activity #3.

Improve the students' ability to correctly spell words most commonly used in writing. Student Learning Activity #4.

Improve the students' ability to write legibly. Student Learning Activity #4.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Applying facts and principles. Student Learning Activity #4.

Designing projects or investigating. Student Learning Activity #4.

Creating. Student Learning Activity #4.

STUDENT LEARNING ACTIVITIES:

1. Invite a local agribusiness manager to talk to your class about the advantages of advertising and publicity for his/her business. Have students identify specific characteristics of the manager's advertising plan. Discuss these characteristics. Present and discuss TM-1.

2. Bring into class a variety of newspapers and magazines. Pass out to each student one of each and have them select one advertisement that they like the best. Have them write down the characteristics that they like in the ad and those that they would improve. Using ACT-2, have students evaluate their advertisement.

3. Review and discuss TM-3 and 4. Using ACT-5, pair students off and have each team develop an advertising plan for a specific business in town. Encourage students to meet with the manager of the business to discuss their strategies. Determine an appropriate budget for the project.

4. Review and discuss TM-6, 7, and 8. Group students and have each group: (1) design and set up a display of products sold in an equipment dealership (parts, supplies, hardware, lubricants, etc.); (2) layout a store sign for the dealership; and (3) write a radio or television spot. When students have completed each type of advertisement, have the class judge each group's work.

CONCLUSION:

Promotion in agriculture.

What is promotion:

A group of activities intended to sell a product, service, or idea in order to make a profit.

To inform

To create interest

To persuade

Some examples of the use of promotion in agriculture are:

Agricultural mechanics:

Information about machinery:

Production techniques

Quality

Utilization and maintenance

Services:

Construction

Custom services

Agricultural supplies and services:

Make public aware of supplies and services.

To accept the local agribusiness.

Make aware of the need for the supplies and services.

How to use and maintain the supplies.

Some promotional methods used in agribusiness are:

Personal selling: (one on one)

Media advertising:

Television

Radio

Newspaper

Magazines

Trade journals

Other:

Telephone directories

Association yearbooks

Billboards

Matchbook covers

Displays: (exhibited near point of purchase to persuade customers to purchase).

Exhibits: (fairs, shows, conventions).

Allow customers to firsthand view the product and ask questions. It allows a lot of exposure for the product.

Demonstrations: allow customers to see product in action.

Sponsorship: (helps to create a good image and establish future customers.

Awards, events, or individuals are sponsored by agribusiness.

Sales promotions:

Give away items that contain a message with the name and address of the agribusiness.

Publicity: (free advertisement).

A news story in the media.

Prominent individual using your products.

Advertising in agribusiness.

What is advertising and the main purposes behind it?

Advertising is paid, nonpersonal promotion of products, information, and services by an identified sponsor.

Benefits of advertising:

Gets attention and delivers the message fast.

Reaches many people economically.

Identifies customers in large populations.

Purposes:

Source of information:

Availability (what, where, when, etc.)

Features

Benefits

Operation, application, and maintenance

Safety cautions

Latest technology

To persuade:

To convince customers that the product or service will supply their need.

To create potential customers:

Appeal to the rational or emotional qualities related to the product or service.

To remind people that they need certain products or services at specific times of the year, or that a sale is for a limited period of time.

Use of advertising:

To the advertiser:

Brings people directly to the place of business.

Sells directly.

Attracts new customers and encourages old ones.

Helps move inventory fast.

To the customer:

Helps them to obtain desired products and services.

Helps people make decisions by providing information.

Alerts buyers to price savings.

Helps to keep current information available.

To everybody:

Helps to generate the private enterprise system.

Economically supports the mass media.

Helps provide jobs and keeps people buying.

Competition through advertsing helps encourage good supply and good products.

Kinds of advertising:

Product (tells the public what to buy by promoting specific products).

Helps support personal selling.

Product information helps customers realize needs.

Provide customers with a basis from which to ask questions.

Reminds people of products or services.

Business firm (tells the public of availability of desired products).

Informs of specific firms that offer goods and services.

May highlight virtues of the agribusiness.

Manufacturer (usually regional or national).

To attract dealers who sell and distribute products.

Intrusive (high powered products advertising).

Directional (emphasizes information about a specific product).

Breed and seed directories

Yellow pages

Different types of advertising media.

Print media.

Uses:

Grain and livestock reports

Classified ads

Display ads from agribusiness

Special feature articles about agriculture

Benefits:

Because of the circulation.

Most adults read newspapers.

Most papers devote 50% to 70% of their space to ads.

People expect to find product information in the paper.

Purchasing newspaper ads:

Buy the column inch (width of a column of print and one inch in length).

Different rates per column inch for classified, display, the day advertised, and usually a discount for using over a certain amount of column inches.

Uses and benefits of magazine advertising:

To reach a national audience or specific audience.

Magazines are usually kept longer which will in turn allow for the possibility of more people viewing the ad.

Ad will have a higher quality of attractiveness due to colors, paper quality, etc.

Costs are higher than newspapers.

Use of trade journals:

To reach a very select audience.

Use of fliers:

To advertise directly to potential customers.

The advertiser pays for all cost of production and distribution.

Broadcast media:

Radio:

AM or FM stations, however, AM reaches a broader audience area.

AM usually costs more.

Personalized way to advertise (reaches the tractor driver or into the home or shop).

Purchased in time blocks of 10, 30, or 60 seconds.

Television:

Appeals to more of the five senses than any other media.

Covers a wider area.

Purchased in time blocks.

Specialty advertising:

Outdoor:

Billboards

Sides of buildings or vehicles

Specialty:

Novelties (key chains, yardsticks, etc.)

Calendars

Advertising and display:

Two classificatons of displays:

Promotional:

Attract attention to products and supplies.

Features:

Products

Equipment

Charts and graphs

Institutional:

Used to promote the agribusiness as a whole.

To present a good image or a particular aspect of business.

Features:

Displays that promote specific community activities (such as FFA Week).

Holiday themes.

Where and why do you use displays?

Outside:

Exhibits at fairs or shows

Demonstration plots

Animals

Large equipment

Window:

Attract customers to store.

Part of the overall appearance of the business.

Features:

Single items

Seasonal items or services

Sale items

Related merchandise

Complete line of goods

Interior:

Very important because of self-service customers.

Entrance and exit:

First place to greet the customer.

Last place to leave a favorable impression.

Best placed on right hand side.

Best in high traffic areas.

Point of purchase:

Items most likely to be bought on impulse.

Frequenty used, inexpensive items.

Open areas:

Used for large displays.

Show products in aciton.

Counter tops:

Most effective displays are at eye level.

Walls:

Utilizes space efficiency and can be seen from far away.

Hanging:

Utilized space.

Shelves:

Closed cases:

For fragile or expensive items that need special handling.

Principles of display design:

Balance:

Arranging the display so that equal attention is given to all items and parts of the display.

Contrast:

Working with different combinations of colors, shapes, and sizes to set off their dissimilar qualities.

Emphasis:

Point to one main idea or item.

Harmony:

Combining items to create an effect of things blended together.

Proportion:

Relationship of objects to one another and as seen in the real world.

Repetition:

The recurrence of a definite cycle.

Causes the eye to move smoothly over the display.

Rhythm:

Placing item in graduation.

- Step arrangement.

- Unity:
  - Things fit together to give a total continuity.

Elements of display design:

- Color: psychologically stirs emotions.
- Direction:
  - Horizontal: gives emphasis to order and dignity.
  - Vertical: gives impressions of height, uprightness.
  - Diagonal: guides your attention in certain directions.
- Lines:
  - Straight lines: formal, rigid, and precise.
  - Curved lines: are informal and relaxed.
  - Lines can be obtained through arrangement of products or props such as rope.
  - Shaped: used for backgrounds, arrangements, props, and containers.
- Size:
  - Contract created by combining objects of different sizes.
  - Different ratios create pleasing proportions.
- Texture:
  - Used for contrast and to set an environment.

Value:

The degree of light and dark in colors.

Weight:

Lightweight effect created by using small, light colored, smooth colored objects.

Heavier appearance achieved by large, dark, rough textured items.

Effectively planning a display:

Establishing a theme:

Central ideas which relate to the product, supply, or service.

General ideas for themes include:

Seasons

Current events

Holidays

Determine settings by answering the following questions about your product or service:

What is it?

How and where do you use it?

What are its main selling features and benefits?

Sketches:

Show the general outlay of the display.

Help in determining the materials needed.

Gives a general plan of action.

Make several sketches to try other possibilities.

Two views are usually appropriate (the front and top view).

Constructing displays:

Display arrangements:

Interference:

Grouping: eye focuses on the center.

Pyramid:

Pyramid shape

Used for stacking

Suggests abundance and availabilty of product

Radiation:

A center point from which things radiate out, such as spokes from the hub of a wheel.

Used frequently in giving descriptive information about products or services.

Repetition:

Items that are similar placed in mass, along straight or curved lines, at the same angle, and usually equal distances from one another.

Customers tend to remember items which are repeated.

Stairstep:

Items arranged on stairsteps.

Suggest increasing advancement or progress.

Materials and accessories needed:

Props: fixtures to support and hold merchandise and accessories.

Must be stable and strong enough for support; they give the basic shape and provide for special effects.

Most frequently used props include:

Panels and screens

Tables and stands

Cubes or crates made of wood

Mannequins and forms show products in use

Easels or tripod stands

Other materials, tools, and accessories:

Backgrounds and landscaping can be made of paper, cloth, and plastic or plant material

Paints give color or accent.

Construction supplies include lumber, hardware, plumbing, staples, thumbtacks or pins, and wire.

Tools: scissors, hammer, staple gun, pliers, screwdrivers, hand saw, X-acto knife, and carpenters square.

Floor coverings could include paper, carpeting, cloth, sand, soil, rocks, bricks, sawdust, or gain.

Display set-up steps:

Build the basic form which includes walls, flooring and shelving.

Provide any utilities that might be needed (electricity and water).

Place and securely fasten all props and products.

Add any extra accessories that give realism or attract customers.

Position written information so that it can be easily read and is attractive.

Take a final look and make adjustments that will add to the attraction and overall effectiveness of the display.

EVALUATION:

At the completion of this unit, students will be able to:

Describe various methods of promotion as related to agriculture.

Recognize how advertising is used in agribusiness.

Describe the different types of advertising media used by agribusinesses.

Design an agribusiness display.

Construct an agribusiness display.

Recognize ways of maintaining and increasing the effectiveness of displays.

OPTIONAL LEARNING ACTIVITIES:

Have a person who works in advertising come and speak to the class about the impact of advertising on the sale of specific products. This same individual can also speak on the experience and qualifications one would need to enter the profession of advertising.

Take your students on a walking tour of your local business community to identify the various displays and techniques used by local agribusiness merchants to advertise their products or product lines.

REFERENCES AND INSTRUCTIONAL MATERIALS:

Advertising and Display in Agribusiness. McGuire, James. E. McGraw-Hill. New York, New York. 1979.

Agricultural Business Sales and Marketing: a Curriculum Material. Instructional Materials Laboratory, University of Missouri-Columbia, Columbia. June 1984. (Catalog AG-51-1)

GOOD ADVERTISING:

INFORMS

TELLS THE TRUTH

IS OF GOOD TASTE

PAYS ITS OWN COSTS

SERVES THE PUBLIC

NEWSPAPER AD EVALUATION

Evaluate your newspaper ads using the following scale:

To what degree did the ad:

	Very Much	Much	Some	Little	None
Inform the public	5	4	3	2	1
Tell the truth	5	4	3	2	1
Appear in good taste	5	4	3	2	1
Pay for its cost	5	4	3	2	1
Serve the public	5	4	3	2	1

TOTAL SCORE _____

List what you would do to improve the ad?

AN ADVERTISING CAMPAIGN SHOULD INCLUDE:

The area to be covered
Costs related to returns
Size of expenditures
Age and reputation of the business
Location of the business
Advertising schedule
Long range objectives
Short range objectives

Factors to Consider when Advertising

* Advertising expense compared to gross sales
* Calculation of monthly advertising expenses
* Percent of advertising devoted to each type of media
* Best space contract with the newspapers
* Position of ad in paper
* Mailing direct to potential customers
* Maintaining an up-to-date mailing list
* Most effective mailing rates
* Non-productive advertising
* Competition with other businesses

DEVELOPING AN ADVERTISING CAMPAIGN

Using the points on TM-4 and selected references, lay out a sales campaign for a local business.

Sales area to be covered (use your community):

Costs vs. returns:

Size of expenditures:

Type	Amount

Time schedule for advertising:

Short range objectives:

Long range objectives:

TYPES OF ADVERTISING MEDIA

Window display
Direct mail
Television
Sign on trucks
Organizational magazines
Outdoor billboards
Cooperative advertising
Quality of product sold
Newspaper ads
Radio
Store front sign
Yellow pages
Bus ads
Word-of-mouth
Phone chain
Magazines

WHEN PREPARING NEWSPAPER ADS:

Stick to one idea

Select your readers

Frame ad so it will stand out

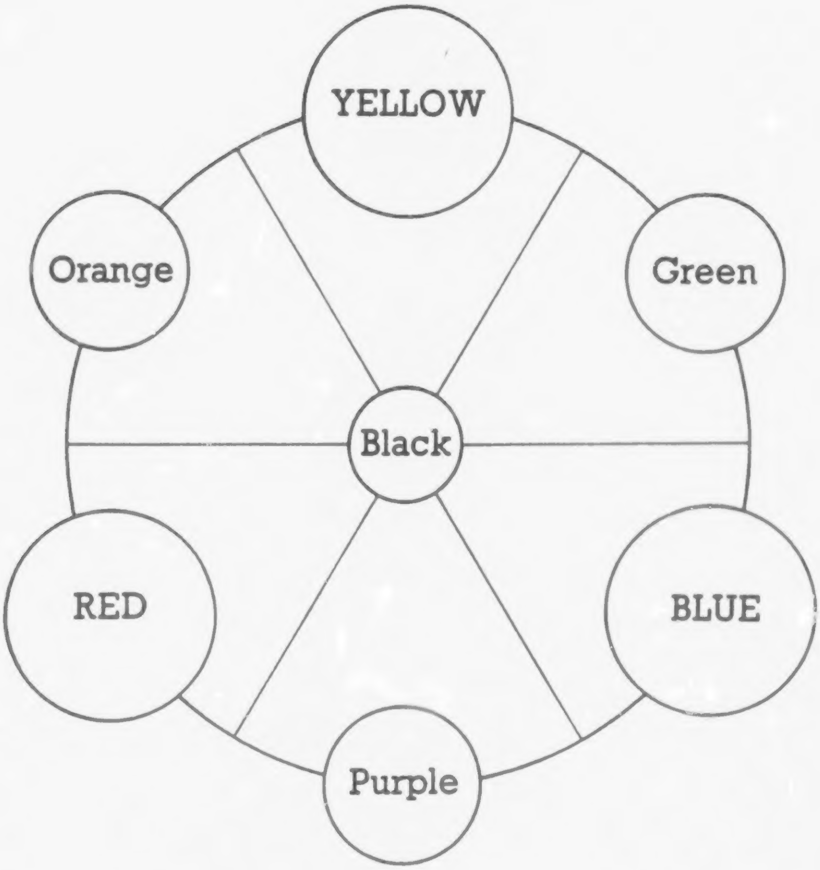
Do not divide the ad

Do not crowd the ad

Make sure it is easy to read

Include only the essentials

The Color Wheel



- **Six Main Points on the Wheel:** red, yellow, blue, orange, green, purple
- **Primary colors:** red, yellow, blue
- **Secondary colors:** obtained by mixing two primary colors (orange, green, and purple)
- **Intermediate colors:** combination of one primary or one secondary color
- **Complementary colors:** colors directly opposite each other on the wheel, such as red and green
- **Triad:** three colors located an equal distance apart on the color wheel, such as red, yellow, and blue
- **Adjacent (analogous) colors:** colors next to one another on the color wheel, such as yellow, yellow-green, and green

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PROBLEM AREA 4

WHAT SELLING SKILLS WOULD ONE NEED TO EFFECTIVELY SELL PRODUCTS AND SERVICES IN AN AGRICULTURAL EQUIPMENT DEALERSHIP?

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PROBLEM 4: What selling skills would one need to effectively sell products and services in an agricultural equipment dealership?

INTEREST APPROACH:

You are the new sales manager of a large agricultural equipment dealership and you have noticed your sales staff exhibiting poor selling skills. You have called them all together for an inservice session on "selling." What skills will they need to develop to effectively sell agricultural equipment?

STUDY QUESTIONS:

1. What skills does one need to develop for selling in agriculture?
2. How are the needs and wants of customers determined?
3. How does one prepare for and approach the potential customer?
4. How should agricultural supplies and products be presented?
5. What is the technique of suggestive selling?
6. What are some specific selling objections and how should they be dealt with?
7. How does one close a sale?

LEARNER NEEDS:

Many student learning needs can be enhanced through introduction on this problem. The following learning activities should be emphasized through Student Learning Activities:

For cooperation with others in reaching a common goal. Student Learning Activity #5.

To use human relation and communicative skills in social interaction. Student Learning Activity #5.

For independent thinking with less need for models. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Strengthen the students' ability to follow oral and written instructions. Student Learning Activity #3.

Improve the students' ability to correctly spell words most commonly used in writing. Student Learning Activity #1.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities.

Identifying stated and unstated assumptions. Student Learning Activity #2.

Interpretation of statements. Student Learning Activity #2.

Identifying alternatives and choosing the best one. Student Learning Activity #4.

STUDENT LEARNING ACTIVITIES:

1. Have students complete ACT-1. Ask students why they might want to buy a car; list their reasons on the board. Divide the reasons into needs and wants. Then subdivide needs and wants into categories, using TM-2. Ask students how they can determine customers' needs. Explain how understanding what a customer needs will

assist the salesperson in meeting those needs. This is an important step in becoming successful at selling. Use ACT-3 to help students understand how to relate product features to customer's needs.

2. Review and discuss TM-4, 5 and 6. Have each student list three purchases that they are ready to make in a local store. Give each student a copy of ACT-7 and ask that they complete one for each salesperson for which the above purchases were made. Have students share with class the similarities and differences between each salesperson they encountered.

3. Using TM-8, identify the five steps in making a sale, and ask students what information they would have to commit to memory or to have readily available when selling. Complete ACT-9. Point out the importance of being ready to meet each situation. This can be helpful in developing a positive environment and in maintaining control of the conversation. Have students then complete ACT-10 and 11.

4. Review INFO-12. Have students describe how the salesperson (described in Student Learning Activity #2) closed the sale for each purchase. Have students complete ACT-13. Discuss TM-14.

5. Review and discuss TM-15 and 16. Have students read the telephone conversation given on INFO-17, and using ACT-18, have them evaluate the person receiving the call. Discuss the results.

CONCLUSION:

Selling skills.

Personal skills:

Ability to relate to people.

Personality

Tact

        - Courtesy
        - Initiative
        - Persistence
        - Enthusiasm
    - Good health.
        - How you are feeling is reflected to others.
    - Personal appearance and grooming:
        - You need to sell yourself to your product.
        - Need to look good: posture, dress, hygiene.
    - Ethical standards:
        - Deal honestly with people.
- Dealing with different groups of people.
    - Customer:
        - Call by name if you know them.
        - Be friendly and happy to see them.
        - Listen to them.
        - Don't argue with them.
        - Thank them for their patronage.
    - Co-workers:
        - Need to cooperate with one another to be productive.
        - Need to be courteous for a good working atmosphere.
    - Supervisors:

Be courteous and friendly.

Try to keep communications open.

Suppliers:

Need to treat them like you want your customers to treat you.

Remember you depend on them to supply products for your customers.

They are also good sources of information.

Determining the needs and wants of customes:

Steps that people go through when making a sale:

Attention: engage the person's thoughts.

Interest: attractiveness or usefulness of the item(s).

Desire: definately wanting the item.

Action: the client makes a decision.

Buyer motivation:

Basic human needs:

Refer to Maslow's Hierarchy of Needs (TM-2).

Wants:

Those things that are desired, but not needed.

Other influencing factors:

Money

Priorities

Self-confidence

Self expression

Marketing needs and wants.

One's strongest motivation for buying is for food, shelter, and safety.

Once a need is met, there is no longer any drive to meet that need.

Needs can generally be satisfied in more than one way.

Some buying is based on love, recognition, cost, quality, or service.

Needs that are not apparent at the time can often be activated by the salesperson.

Methods for determining and filling wants and needs.

Determining needs:

Direct questions and answers.

Observe what merchadise the customers look at.

Watch facial expressions.

Listen carefully to what they say, and how they say it.

Don't judge needs by customer's appearance.

Don't jump to conclusions.

Fulfilling needs.

Relate product benefits that best fit customer's needs:

They buy satisfaction.

Most important is what the product does for the customer.

Convert technical knowledge to understandable terms.

Points to remember when explaining product facts:

Put facts into understandable terms.

Relate facts to customer benefits.

Be enthusiastic and positive.

Demonstrate the features of the product.

Don't state facts to show-off your knowledge.

Use facts as a tool to persuade customers to buy.

How knowing customers will help you meet their needs.

Methods of dealing with certain types of customers:

Talkative customer:

Listen carefully and direct conversation toward the product.

Don't lose patience or show irritation.

Indecisive customer:

Provide facts and information about product or service.

Know-it-all customer:

Let them confirm the facts.

Don't compete or argue.

Ask their advice if appropriate and try to agree.

Silent customer:

Ask intelligent questions to stimulate conversation.

Be patient and watch for buying cues.

Disagreeable customer:

Be patient and don't show anger.

Admit to any disadvantage of your product.

Delaying customer:

Show sound facts why they shouldn't delay.

Show confidence in yourself and your product.

Decisive customer:

Keep your sales presentation short.

Be decisive and direct.

Allow them to state their conclusions.

Customers in a hurry:

Approach them immediately.

Determine their needs quickly.

Complete the sale.

Preventing customer complaints:

Best to try to avoid creating dissatisfied customers.

Make sure warranty is understood at time of sale.

Avoid selling customer goods not needed or wanted.

Help the customer make the right decision.

Each agribusiness will have a set policy for handling complaints.

Preparing for and approaching the potential customer.

Five stages in making a sale:

Preparation

Approach

Demonstration

Overcoming resistance

Close

Knowledgeable about product or service:

Advantages and disadvantages.

Factual information.

Who developed it, and how it's made.

When it is needed.

Its benefits.

Maintenance.

Safety in use of the product.

Know the same information about your competitor's product.

- Sources of information:
  - Inside the business:
    - Merchandise itself: labels, cartons
    - Advertisements
    - Customer's experience
    - Manufacturer
    - Personal experience
    - Agribusiness buyer
  - Outside the business:
    - Television and radio advertisements
    - Merchandise testing bureau
    - Comparative shopping
    - U.S. Government publications
    - Courses offered by institutions
    - Periodicals, journals, magazines
    - Libraries
    - Trade organizations
    - Inspection and observation of other stores

Approaching potential customers.

- Methods:
  - Greeting approach:
    - Greet with a pleasant salutation.

Greet with a name if you know it.

Be direct and staightforward, take control of conversation.

Merchandise approach:

First comments are about the product.

Point out its main features and advantages.

This is the most favored sales approach.

Service approach.

Ask if you can be of service.

Avoid asking questions that can be answered with a simple yes or no answer.

Opening a sale.

Make a suggestion.

Demonstrate your product.

Offer to survey their operation to help them decide on their needs.

Refer to a testimonial from a satisfied customer.

Presenting agricultural supplies and products

Four steps in presenting:

Capture the customer's attention.

Make them aware of a need.

Convince them your product provides the best benefits.

- Sell at the right time:
  - Appropriate season.
  - Utilize other conditions (for instance if the customer just bought more land or livestock).

Create interest.

- Offer technical information about the product.
  - Efficiency
  - Durability
- Explain advantages of your store or company.
  - Service availability
  - Guaranty
- Activate desire.
  - Watch for customer's reaction.
  - Continue questioning to identify exact need.
  - Apeal to that need.
- Encourage action.
  - Demonstrate the product.
  - Bring into focus that customer's needs, interests, and desires.
  - Other, trial period, price won't last, etc.

- Making a good sales presentation.
  - Prepare the demonstration.
    - Gather all pertinent information.
    - Outline and practice.
  - Match the customer's needs to the benefits.
    - Highlight advantages to the customer.
    - Point out features.
    - Use aids, reports, charts, testimonials, articles, etc.
  - Point out the most obvious benefits first.
    - Listen to the concerns and the questions of the customer.
  - Get the customer involved.
    - Appeal to the customer's five senses: hearing, sight, touch, taste, and smell.
  - Keep communication positive.
    - Don't argue or tell customer directly that they are wrong.
    - Ask questions that will elicit positive responses.
  - Keep the customer motivated.
    - Maintain their interest and attention.
    - Use unique demonstrations and examples.
    - Be dramatic, dynamic, and enthusiastic.

Close the sale when the customer is ready.

Regardless of where you are in the presentation.

Suggestive selling:

Suggestive selling:

The act of placing an idea in the customer's mind about a product or service that they didn't ask about to influence buying.

Types of suggestive selling:

Spontaneous:

Suggestions that just seem to appear out of a given situation.

They are good because they usually originate with the customer.

Vivid:

Make the suggestion noticeable.

Add to the suggestion all the major benefits.

Connected:

Match suggestions to the customer's desires.

Match suggestions to the product already purchased.

Prestige:

Suggestions have more impact when given by experienced and well respected individuals.

Clear facts and proven information may be used to make suggestions more favorable.

Repeated:

The more times you suggest the same thing the better chance it will be acted upon.

Be careful not to annoy the customer.

Unopposed:

Try to keep your suggestions in line with the sales presentation.

In line with the product and customer's needs.

Don't make suggestions opposed to one another.

Using suggestive selling:

Seasonable (act early before seasonal demand).

Buying clues (occur anytime during the presentation).

Larger quantity (sometimes offer price breaks, convenience).

Special sales (customers are always interested in discounts).

Substitute selling:

The suggesting of another product that can replace the one sought and still meet the customer's needs.

Some specific objections and how to deal with them:

No solution: These are objections that can't be overcome. Some examples are:

Not enough finances to pay for your product or service.

Not authorized to buy.

Doesn't fit his or her need.

Don't force your presentation over these objections.

Need: These are objections made because the customer doesn't believe your merchandise fits their need.

You must help the customer to be aware of his need and the benefits of your product or service.

Quality: Your product or your service sems to be lacking in some way so that it might not be able to perform well. An example is:

"Are you sure that post hole auger is made of steel strong enough to withstand rocks?"

If you have higher quality products, show them.

Emphasize features that offset poor points.

Also clarify any questions about lack of quality that are not true.

Source: Not familiar with brand or manufacture. An example is:

"Well, I always buy Bob Bear tractors; I don't know too much about those big green tractors."

Give examples of other satisfied customers.

Compare your product to other brands.

Point out all the beneficial features.

Give information about the product or service and the company.

Price: The price of your product seems too high. Some examples are:

"Why does this item cost more than that one? They look exactly the same."

Highlight the quality of your merchandise.

Show less expensive products if you have them.

Truthfully compare the quality of the product with competitor's.

The following are reasons for different prices between two products:

Better quality.

Difference in construction.

Handmade v. machine made.

Different brands - reputation, guarantees.

Less maintenance or repairs.

Time: Too busy for a sales presentation, or your product is not needed at the present time of the year. Some examples are:

Trying to sell to a farmer when he is busy with a farm operation, such as harvesting.

Trying to sell snow blowers in July.

Make appointments.

Agree to come back later.

Point out advantages of buying out of season - price, taxes, etc.

Service: Kind of service and availability of service. Some examples are:

"I need to grind feed for my hogs every day; what happens if the grinder I bought breaks down?"

"I would like to buy a combine from you but your dealership is located 100 miles from my farm."

You need to be able to guarantee good and fast service.

Statistics showing the minimal service required on your products would be helpful.

What are some general rules in handling objections?

Get a clear understanding of the objection.

Have the objection restated if it is not clear.

Do not interrupt before the customer is finished.

Do not flatly say a customer is wrong.

Point out that they have an interesting viewpoint, however, we could look at it another way.

Agree that you have heard that objection before, but others have found that this product is actually better.

Restate the customer's objection in your own words.

Do it in a less negative way.

Helps to see if you really undertand the objection.

Change the customer's objection into a question.

Restate the customer's statement into a question.

This can lead into your sales talk.

- Try to turn objectives into advantages.
  - You need to have good knowledge of your product.
  - Think quickly on your feet.

Closing a sale:

- Techniques of closing a sale:
  - Ask straight out for the order.
  - Reduce the choices.
  - Assume it is time to close.
  - Offer a free gift (premium):
    - Used when customer is not quite sure of buying.
    - Offer some bonus such as accessories or payment on a credit plan.
  - Summarize the selling points.
  - Suggest an urgency:
    - Be honest and sincere.
    - The product is selling fast.
    - The price is going up.
  - Reasons for failure:
    - Reasons for not closing a sale:
      - Assuming the customer isn't going to buy.
      - Trying to force a sale.
      - Hurrying the customer.

Leaving one customer for another.

Not relating the right benefits.

Being discourteous.

Ten questions to analyze a lost sale:

How was my greeting and did I smile?

Was my personal appearance acceptable?

Did I have confidence in myself?

Did I show knowledge of the product?

Did I talk too much?

Did I overcome objections, or did they confuse me?

Did I demonstrate the item correctly?

Was any question raised that I could not answer?

Did I indicate the services available for this product?

Did I recognize when it was time to close the sale?

Reasons why the customer doesn't return TM-14):

Not giving service on previous sale.

Can get a better buy at a competitor.

No one sold them on the product or service.

Parts unavailable.

Use of high pressure sales.

Unfair or unequal pricing policies.

Employee has a poor attitude.

Farm not visited.

Wrong product for the customer's need.

No follow-through after the sale.

No trade-in on machinery.

Lack of demonstrations.

Items not stocked.

No follow-up after initial inquiry.

After the sale:

Reassure the customer:

"You've made the right choice," or "The product will serve you well."

Suggest other items that might be related to the item purchased.

Make necessary arrangements for the safe delivery of the product.

Make sure the customer received a sales receipt.

Contact the customer after the sale to determine satisfaction:

If so, try to correct.

If there is, use it as a testimonial for future sales.

One of the best ways to get repeat customers.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify the skills needed to sell in agriculture.

Select appropriate methods of meeting customers' needs.

Correctly approach the potential customer.

Give a sales presentation of agricultural supplies and products.

Properly deal with, and overcome customer objections to buying.

Describe the technique of suggestive selling.

Effectivey close a sale.

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Agricultural Business Sales and Marketing: a Curriculum Material; Instructional Materials Laboratory, University of Missouri-Columbia, Columbia, Missouri, June 1984. (Catalog Number AG-51-1)

Human Relations in Agricultural Business. Agricultural Education Curriculum Materials Service, The Ohio State University. 1976.

SELF-ANALYSIS OF INTEREST IN SALES WORK

Which of these statements describes you? If the answer is "yes," draw a circle around the "Y." If the answer is "no," draw a circle around the "N." It is in your own interest to be as fair and accurate as possible in your answers.

1. I'd rather deal with things than with people Y N
2. I think mathematics is a very interesting subject Y N
3. I like talking to strangers Y N
4. I dislike group activities Y N
5. People find it easy to approach me Y N
6. I would like to do research in science Y N
7. I'd enjoy raising money for a worthy cause Y N
8. I prefer to be by myself Y N
9. I've more than average desire to own things. Y N
10. I would like to design farm implements Y N
11. I would like to attend conventions. Y N
12. I've more than average mechanical ingenuity Y N
13. I dislike people who borrow things Y N
14. I would like to be a mechanical engineer Y N
15. I like people of all nationalities in my community Y N
16. I'd like to work a 40-hour week Y N
17. I would enjoy making speeches. Y N
18. I'd like to be head of a research department. Y N
19. I like to keep meeting new people Y N
20. I enjoy bargaining when I'm buying something Y N
21. I'd like to develop some new scientific theories Y N
22. I'd like a straight salary in my life work Y N
23. I prefer only a few really intimate friends. Y N
24. I'm better than average at judging values Y N
25. I like to get other people's viewpoint Y N

Maslow's Hierarchy of Needs

Self-actualization

Respect

Love and Approval

Security

Survival

PRODUCT ANALYSIS SHEET

Using a product of your choice, list at least five selling features of the product. These features should be similar to the list below. Convert these selling features into benefits while keeping customer needs in mind.

Color
Size
Shape
Texture
Finish
Feel
Packaging
Pattern
Design
Price
Odor
Taste
Construction
Usability
Versatility
Serviceability
Durability
Comfort
Convenience

PRODUCT

____

Features	Benefits
Example: Chainsaw Design	The new antivibration design will reduce operation fatigue
1.	
2.	
3.	
4.	
5.	
6.	

Selling To Farmers

Products

- Fuel
- Seed
- Fertilizer
- Machinery

Rancher
Farmer

Services

- Insurance
- Artificial Insemination
- Economic Analysis
- Fertilizer & Pesticide Application

A Salesperson Should Avoid:

Neglecting customers

Distractions and confusion in the store

Failing to upgrade the sale

Failing to sell related merchandise

Lack of knowledge about merchandise being sold

Failing to suggest uses for merchandise

Failing to close a sale

Failing to show merchandise to the customer

Too much conversation

An Effective Salesperson Should

Name the initiative for selling

Like people

Be ambitious, dependable, and efficient

Have good health

Have pleasing personality and appearance

Be diplomatic and courteous

Get along well with others

Know store merchandise, prices, and policies

Sales Approach Analysis

Indicate your perception about the sales approach you experienced when making your purchase.

Type of salesperson: _____ Order Taker

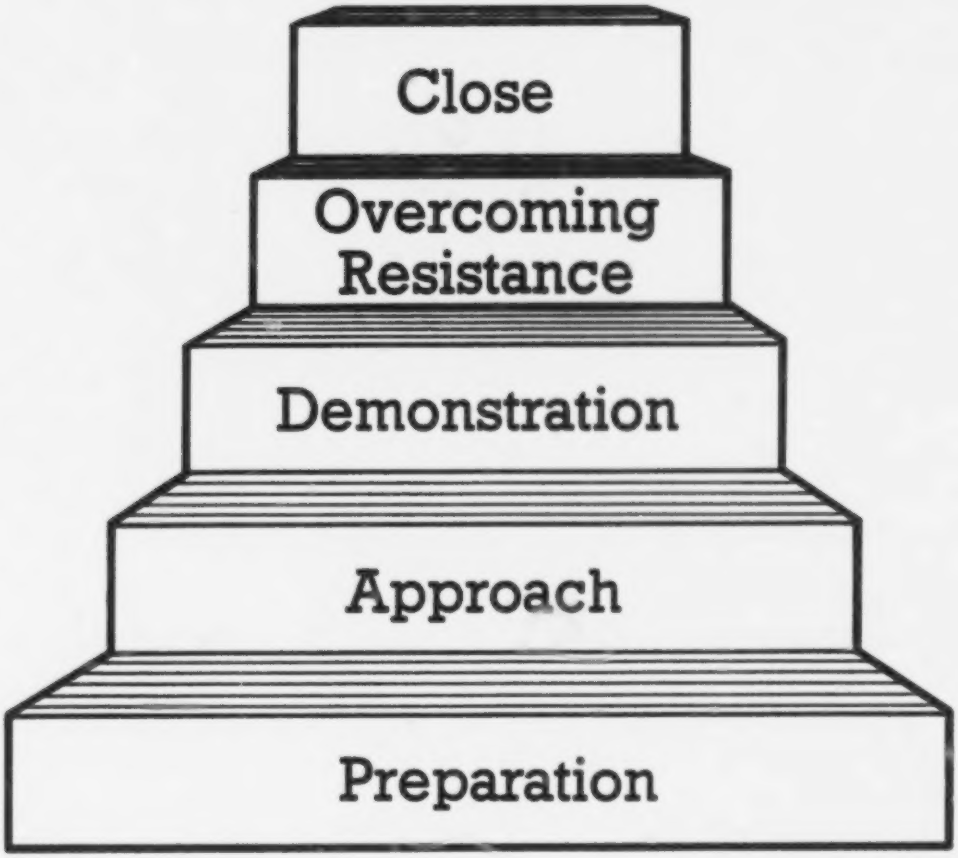
_____ Negotiation Type

_____ Creative Salesman

Rate the salesperson:

	Very Much	Much	Some	Little	None
Showed initiative to sell	5	4	3	2	1
Liked people	5	4	3	2	1
Was ambitious	5	4	3	2	1
Was efficient	5	4	3	2	1
Had good health	5	4	3	2	1
Had a pleasing personality	5	4	3	2	1
Had a pleasant appearance	5	4	3	2	1
Was courteous	5	4	3	2	1
Knew the merchandise	5	4	3	2	1
Was confident	5	4	3	2	1
Communicated easily with you	5	4	3	2	1

Five Steps In Making A Sale


Close
Overcoming Resistance
Demonstration
Approach
Preparation

____
Product

WHAT A SALESPERSON SHOULD KNOW ABOUT THE PRODUCT HE/SHE HANDLES

Use of the product: ____
____

How the product works: (or how used?) ____
____

What the product is made of: ____
____

How the product is made: ____
____

Instructions for using: ____
____

Who is manufacturer: ____

Storage of product: ____
____

Maintenance of product: (if not consumable) ____
____

Packaging: (sizes and material) ____
____

Prices: ____
____

SELLING APPROACHES

"Remember me?"

"I'm the fellow who goes into the local machiner dealer and waits at the counter while the parts salesperson does everything but take my order. I'm the fellow who goes into a feed store and stand quietly while the salespersons finish their little chit-chat. I'm the farmer who drives up to the local co-op and never blows the horn, but waits patiently while the attendant finishes his comic book."

"Yes, you might say I'm a good guy. But do you know who else I am? I am the fellow who never comes back, and it amuses me to see you spending thousands of dollars every year to get me back to your agribusiness when I was there in the first place; and all you had to do to keep me was to give me a little service; show me a little courtesy.'

1. Write a greeting, merchandise, and service approach; also include a technique for opening a sale for the following products or services.

   A. Tires.

      1.

      2.

      3.

      4.

600

B. Annual servicing of equipment by the ag equip dealership.

1.

2.

3.

4.

C. Combine

1.

2.

3.

4.

DEALING WITH CUSTOMERS

Below are some problems in which you are to assume the salesperson's role. By the behavior described, determine the type of customer and state two ways to deal with the person when making a sale.

1. Tom has entered the local co-op hardware store. You notice that he goes straight to the hand tool aisle, picks up a level, and starts toward you.

   Type of customer ____________________

   a.

   b.

2. You approach Mrs. Smith in an aisle, she immediately looks up at you and starts talking about the upcoming town rodeo. You mention that there is a special on the garden gloves in front of her, and she starts talking about how pretty her roses are.

   Type of customer ____________________

   a.

   b.

3. While making your rounds as a local machinery salesperson you stop at the M_____ farm. You know he needs a new tractor. He starts talking to you about the horsepower, conviences, and features of your brand of tractor compared to other brands. When you explain a feature, he corrects your statements and continues to tell about additional benefits.

   Type of customer ____________________

   a.

   b.

DO'S AND DON'TS OF CLOSING A SALE

A. Do display a friendly manner at the close, even though there is a disagreement between the prospective customer and the salesperson. This helps to avoid arguments.

B. Do be sure to have all materials and equipment that will be needed. Misplaced order blanks, obsolete price lists, and dry fountain pens can lose sales.

C. Do realize that begging for a sale makes the salesperson and the offer look bad - it also disgusts the prospective customer.

D. Do ask the prospective customer to "OK" or approve the order rather than sign it.

E. Do make buying as easy and painless as possible.

F. Do try for privacy at the close. Phone calls and third parties distract.

G. Do study each prospective customer as a baseball pitcher studies each batter. Then pitch to his weakness.

H. Don't let the prospective customer know how much the sale means.

I. Don't be apologetic, particularly in quoting prices.

J. Don't make written or even oral promises unless authorized to do so; otherwise there will be friction and expense.

K. Don't make ceremony out of closing. This may frighten the prospective customer.

L. Don't give the prospective customer an excuse or an opportunity to back away from the purchase.

M. Don't ever ask the prospect for the buying decision in such a way that he can answer with a "Yes" or "No", for the latter closes the door.

N. Don't make it difficult for the prospective customer to complete his purchase quickly if he cares to do so.

OVERCOMING OBJECTIONS

From the following objections listed below, tell what type or types of objection they are and how to overcome them.

1. "I would like to buy the plow from you, but I won't need it until next fall."

   Type(s) ____________________

2. "I've got to finish putting this seed in the ground and don't have time to talk to you about that new tractor."

   Type(s) ____________________

3. "That is a nice automatic feeding system, but with all those gadgets, wouldn't more things go wrong?"

   Type(s) ____________________

4. "Those livestock gates don't look very sturdy; what brand did you say they were?"

   Type(s) ____________________

Why Customers Quit

1% DIE

3% MOVE AWAY

5% OTHER FRIENDSHIPS

9% COMPETITIVE REASONS

14% PRODUCT DISSATISFACTION

68% QUIT BECAUSE OF ATTITUDE OF INDIFFERENCE TOWARD CUSTOMER BY SOME EMPLOYEE

When Using the Telephone

Answer the telephone promptly.

Speak clearly and distinctly.

Give name of the business.

Give employee's name.

Be cheerful and friendly.

Be courteous.

Avoid coughing into the mouthpiece.

Never drop the receiver with the customer on the line.

Always let the customer hang-up first.

Know what merchandise is available and at what price.

Spell names and addresses correctly.

Get correct delivery information.

Use good English.

Help customers decide.

Acknowledge customer's likes and dislikes.

Ask if there is anything else the customer needs.

When Using the Telephone Avoid:

Slow, indifferent and incomplete answers.

Failing to listen to what the customer wants.

Failing to use word pictures.

Failing to sell extra items, larger quantities, or better merchandise.

Failing to ask the customers to buy.

Winning the argument and losing the sales.

Failing to follow through.

TELEPHONE SITUATION PROBLEM

The situation: You are working in the parts department of the HANDY FARM EQUIPMENT CO. A farmer calls in to see when a corn picker can be repaired. A chain broke while picking corn. It is a busy season and all the service people are busy.

Grade the person who is receiving the call.

Person Making the Call	Person Receiving the Call
	Parts Dept.: Answers phone (identification)
Farmer: I was wondering how soon I could have one of your service people come out and fix my corn picker.	
	Parts Dept.: Find out what is wrong with the picker.
Farmer: Broken chain.	
	Parts Dept.: You will have to check with our service manager. (How to handle waiting period) (Count 60 seconds before talking again.) All of the service people are out and probably will be all day.
Farmer: (Rather irritated.) But I can't do a thing until I get this fixed and it may rain by tomorrow.	
	Parts Dept.: Ask if this is a chain that could be brought in and repaired.
Farmer: I don't call that very good service, but if that is the best you can do I guess I can bring it in.	
	Parts Dept.: Ask for the part number so you could be getting ready while the farmer is on the way in.
Farmer: I can't give you the part number, but it is the main drive chain on model 580 picker.	
	Parts Dept.: State that this will help. Close the conversation courteously and give the impression of good service.

Take a few minutes to make up the conversation for the parts man before starting to talk on the phone.

Adapted From: Human Relations in Agricultural Businesses, 1976, Ohio Agricultural Education Curriculum Materials Service, The Ohio State University.

TELEPHONE CONVERSATION EVALUATION FORM

	Yes	No
Answered promptly	___	___
Spoke clearly	___	___
Gave name of business	___	___
Game name of employee	___	___
Was cheerful	___	___
Was friendly	___	___
Was courteous	___	___
Knew merchandise being sold	___	___
Let customer hang-up first	___	___
Checked on spelling of names	___	___
Checked addresses	___	___
Provided delivery information	___	___
Helped customer	___	___
Used good English	___	___
Helped customers decide	___	___
Acknowledged likes and dislikes	___	___
Asked for other needs	___	___

PROBLEM AREA 5

WHAT ARE THE SKILLS ONE WOULD NEED TO EFFECTIVELY OPERATE (SELL AND PURCHASE PRODUCTS) A PARTS DEPARTMENT IN AN AGRICULTURAL EQUIPMENT DEALERSHIP?

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PROBLEM 5: What are the skills one would need to effectively operate (sell and purchase products) a parts department in an agricultural equipment dealership?

INTEREST APPROACH:

The parts department is an important and rapidly growing part of the modern agricultural equipment dealership. Today sales in most parts departments alone are greater than the total sales of the average dealership ten years ago. And the person who may have run a one-person parts department a few years ago is now a parts manager with three or four employees reporting to them. The parts department is a business in itself in every sense of the word. And it must be managed like a business...by a true manager. As the business manager of an agricultural equipment dealership, how would you evaluate the operation of the parts department and determine how it might be managed more effectively and profitably.

STUDY QUESTIONS:

1. What are the most important characteristics of a parts manager?
2. How does a parts manager grow with his job?
3. What are the major functions of a parts manager?
4. How does one develop a plan of operation for the parts department?
5. What human relations skills does one need to successfully deal with and get working results from employees?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the student learning activities:

For a strong self-image in relation to peer group activities. Student Learning Activity #3.

To accept responsibilities for obligations. Student Learning Activity #3.

For guidance and counseling in careers and/or continuing education. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Strengthen the student's ability to use tables of contents, indexes, headings as guides in reading. Student Learning Activity #1.

Improve the student's ability to express his/her opinion in a clear and concise manner. Student Learning Activity #2.

Strengthen the student's ability to present a straightforward, sincere oral presentation. Student Learning Activity #2.

THINKING SKILLS:

Many thinking skills can enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Improve student's ability to identify obstacles to achieving a goal. Student Learning Activity #1.

Improve student's ability to identify, analyze, and rank alternative solutions to a problem. Student Learning Activity #2.

STUDENT LEARNING ACTIVITIES:

1. The parts manager is in charge of a large amount of capital and a substantial percentage of the dealership's business activity. This department cannot be effectively managed without careful analysis, planning, and control. Divide students into three groups and assign each group either ACT- 1, 2, or 3. Have each group complete this evaluation sheet, as a group effort, by utilizing a local agricultural equipment parts department or a local auto parts store. When each group has completed their respective evaluation, have them orally identify the strengths and weaknesses of their findings.

2. After all the evaluations have been carefully analyzed, using TM-4, the students can, as a class effort, set objectives that address the major problem areas uncovered in the analysis. Through discussion have the class develop a plan using (ACT-5) of operation for the entire parts department by utilizing the information they have collected. Only major objectives should be developed. Four or five action items per objective should also be developed.

3. Using ACT-6, have students enter each action. This form will provide a record of each strategy and corrective action taken for an item and the results of that action.

4. Pass out INFO-7 and read. Discuss the importance of using microfiche to locate information about parts. Demonstrate its use of operation using TM-8. 'If possible, borrow one or visit a parts store.

CONCLUSION:

Characteristics of a good parts manager:

Understands the customer's viewpoint and satisfies their needs.

Recognizes the impact of parts service on customer machine downtime.

Adopts a results-oriented approach; effective, not just efficient.

Establishes specific department objectives in support of overall dealership goals.

Maintains a systematic approach to controlling progress toward meeting objectives.

Assigns priorities, using them to guide day-to-day activities.

Makes efficient use of resources.

Knows how to make a profit.

Keeps parts information up to date.

Has a good knowledge of "will fit" parts and their disadvantages.

Cares about the progress of the business, the profit it produces, and his own self-development.

Actively concerns himself with developing the people in his department.

Is consistent in their actions, applies rules, regulations, and policies firmly and fairly.

Growth of the parts manager:

Does he/she manage?

Is he/she just a "doer", or do they delegate the work to be done and see that it gets done right?

Many managers spend far too much time "doing" rather than delegating

Activities a parts manager should do:

Make decisions on ordering and stocking policies/procedures.

Plan and arrange merchandising displays.

Price. By analyzing the competition's prices, the parts manager can come up with some attractive price packages for fast-moving items:

Offering a toy tractor for $.99 with every purchase of a motor repair kit.

Giving a free hat with every set of plugs sold.

With every six cans of motor oil, offering a can of touch-up paint for $.39.

Deal with other venders and suppliers. The parts manager should spend some time planning what kinds of additional merchandise the department might logically handle to better serve customers and to produce added, profitable revenues.

Activities the parts manager should delegate:

Handling customers at the parts counter for most routine purchases

Putting the stock away

Checking receipts, invoices, and shipments

Getting invoice information to billing

Returning defective merchandise to the manufacturer

Major functions of a parts manager:

Merchandising:

Managers should know the market and should stock the parts that will be needed in that market. Price all items to sell with an eye toward what the competition is charging.

Selling:

When taking an order the parts personnel should inquire to see if any other parts are due for replacement in the near future and then suggest that the customer purchase them now. Each customer contact is a potential selling opportunity. The four customer response stages are:

Awareness: Does the customer really know the importance of replacing parts regularly and how it will affect:

Tractor downtime

Protect his/her investment in major equipment

Loss of time = money and labor loss

Comprehension: Does the customer understand how manufacturers parts actually work better and provide a greater return on the investment.

Convicton: Is the customer convinced that the dealership is a "second home" for his equipment.

Action: Does the customer actually make the purchase. If not, then it is up to the parts worker to ask for the order.

Implementing policies:

Written policies should be developed in the following areas:

Extension of credit

Parts return by customers

Parts return by suppliers

Review of inventory control procedures

Inventory levels

Coverage of customer and service department counters

Plan of operation (plan of action) steps:

Set a target or goal to aim for.

Be specific in setting firm objectives for the department. Example: We felt a monthly target of $20,000 parts sales was realistic, but we only did $6,000. Why do you think we fell short? What problems did we encounter? Was the objective unrealistic? If so, why?

With firm objectives, one can tell when the target goal is not being reached and by how much.

Don't look for the easy answer; analyze the problem carefully and look for reasons behind it.

A problem is the difference between where you are and where you want to be.

Look at the differences between actual results and objectives.

Don't rely on intuition.

Make intelligent plans on how to achieve goals:

Once objectives are identified, one can then draw a road map of how to get there (an action plan).

The more refined the objectives, the more thorough the managers plan can be.

With specific objectives, the parts manager can do a much better job of:

Planning sales and merchandising activities

Foreseeing needs in the areas of:

Personnel

Facililties

Inventory

Training

Obtain a sense of achievement:

People are motivated by money, but also by self achievement.

By formally establishing a goal and gaining a commitment to achieve it, the dealer gives employees something tangible to shoot for. This gives them a sense of accomplishment if they reach the goal and lets them make a valuable self-evaluation of how well they are doing.

Make objectives realistic and challenging; not too high or too low.

Remember that output is not all that counts, employees are not machines.

Good communications between manager and worker will help foster a sense of achievement and minimize potential problem areas.

Employee relations and obtaining results**:

Everyone has the capacity to do only so much, but we can increase this capacity by getting things done through others. Where the parts manager is concerned this can be done through a process that involves organizing, delegating, supervising, counseling, motivating, and training.

Organizing: First determine the amount of work to be done and then divide the work into manageable tasks for assignments to others.

Consider the most logical division of the workload.

Clearly spell out each job responsibility.

The lack of clear job definitions is one of the main causes of overlapping responsibility, communication gaps, conflicts among employees, and inadequate performance.

Delegating: is a process that requires:

A clear definition of responsibility and authority

As much counseling and training as necessary for the employee to become self-sufficient

Managers can reduce an employee's self-confidence and lessen the employee's sense of responsibility and desire for self-development by completing a job task for an employee that is not doing it properly.

Be tolerant of mistakes.

Look at the overall picture.

Avoid getting bogged down in the nitty-gritty operating details of the department.

Supervising: Giving clear direction and guidance that results in the jobs getting done with a minimum of confusion, overlap, and omission.

Coordinate the activities of personnel

Counseling: When counseling an employee, the manager's primary objective should be to increase the employee's ability to handle similar problems in the future by asking the employee for sound approaches to the problem. This will develop the employee's self-reliance and decision making skills, but usually produces a better solution to the problem.

Motivating; A person's striving to satisfy their own needs and goals.

One should integrate individual needs with departmental and dealership goals.

The more personal needs employees satisfy in their work, the more productive they will be.

Factors affecting positive motivation:

Consistently and fairly enforce rules, regulations, and policies as well as discipline employees. Employees need to feel they are being treated justly.

Encourage friendly relationships on the job.

Keep employees well informed of:

Department and dealership progress

Pending changes that will have an effect on them.

Give recognition for a job well done, publicly.

Encourage employee participation in such areas as:

Objective setting

Planning

Scheduling

Suggesting ideas for improvement

Training: Should be both formal and informal. The best learning activities lay in the day-to-day activities of the job. Here actions can be evaluated, corrected, or reinforced in the work environment.

The manager's recognition of a worker's shortcoming is an opportunity to remedy that shortcoming--not an occasion to belittle him.

There is not any such thing as a stupid question.

Education is a very slow process.

It is easier to impart technical information than it is to teach someone how to make intelligent judgements.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify the most important ingredient of the parts department.

Explain how a parts manager growd with his/her job.

Outline the major functions of a parts manager.

Develop a plan of operaton for the parts department.

Identify those human relations skills one would need to successfully deal with and get working results from employees.

Demonstrate those micro-computer skills needed to successfully operate a profitable parts department.

OPTIONAL LEARNING ACTIVITIES:

Take students on a tour of a local agricultural equipment dealership.

Invite the parts manager of a local equipment dealership to speak to the class or to simply attend one class session so that students can interview him/her.

REFERENCES & INSTRUCTIONAL MATERIALS:

Agribusiness Procedures and Records, Lee/Lee, Chapter 1.

a) Transparency Master 2 (TM-2): Primary Business Activities

Agricultural Business Sales and Marketing: a Curriculum Material. Instructional Materials Laboratory, University of Missouri-Columbia, Columbia Missouri, Catalog Number AG-51-1, June 1984

SUPPLEMENTAL MATERIALS:

Farm and Ranch Business Management: an Instructional Material. Deere and Company, Service and Training Department, John Deere Road, Moline, Illinois 61265

AE-5

PARTS DEPARTMENT PROFITABILITY EVALUATION

Date:

Item	My Dealership		Comparison		Evaluation					Reason For Evaluation
	Dollars	%	Dollars	%	1	2	3	4	5	
1. Net Sales - Contribution										
2. Gross Margin										
3. Expenses										
4. Operating Margin										
5. Additions/ Deductions										
6. Pre-Tax Income										
7. Pre-Tax Income Growth										
8. Sales Growth Over Last Year										
9. Turnover										
10. Expense Ratio Coverage										
TOTAL										

ACT-1

PARTS DEPARTMENT MANAGER EVALUATION

Date:

AE-5

Function	Evaluation					Reason For Evaluation
	1	2	3	4	5	
1. Customer Relations						
2. Ability to Plan and Budget						
3. Training of Parts Personnel						
4. Inventory Management						
5. Financial Knowledge						
6. Knowledge of Parts Usage						
7. Product Knowledge						
8. Relations With The Service Department						
9. Ability To Promote Merchandise						
10. Ability To Sell						

ACT-2

PARTS DEPARTMENT OPERATIONS EVALUATION

Date:

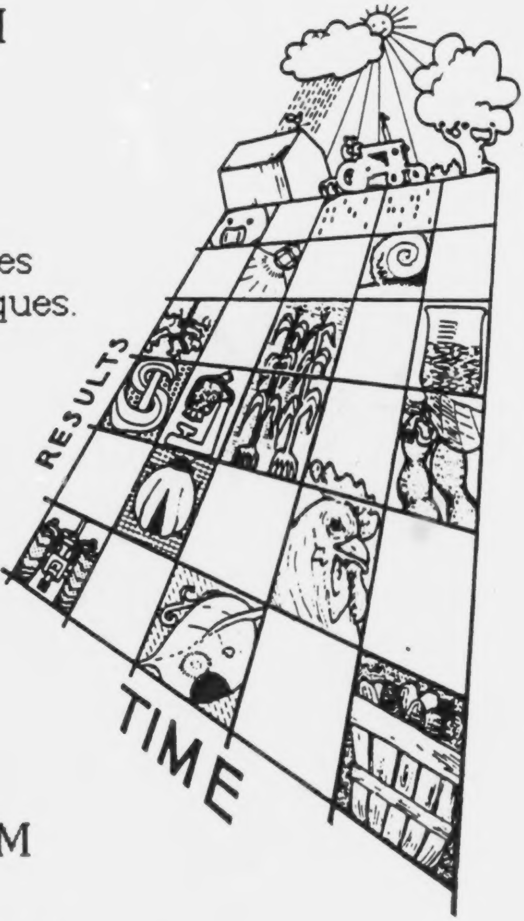
Function	Evaluation					Reason For Evaluation
	1	2	3	4	5	
1. Plan						
2. Budget						
3. Inventory Control (Parts Ordering)						
4. Inventory Control (Paper Flow)						
5. Inventory Control (Physical)						
6. Policies and Procedures (Customer Returns)						
7. Policies And Procedures (Returns To Deere)						
8. Policies And Procedures (Returns To Other Vendors)						
9. Overall Department Customer Appeal						
10. "Junking" Obsolete Items						
TOTAL						

LONG-TERM

-Deals with planning for the future.

-5 to 10 years or more.

-Includes decisions on capital purchases and adoption of new business techniques.

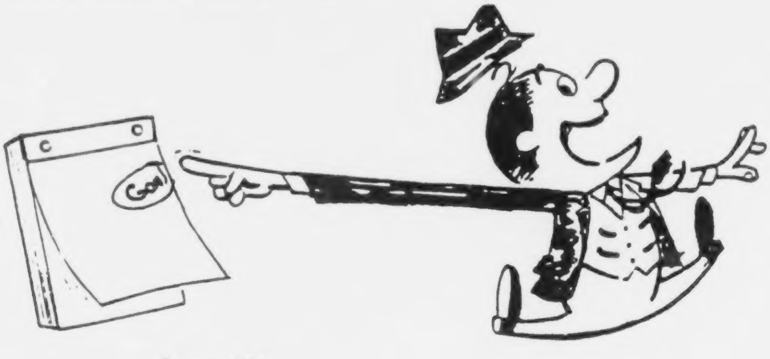


SHORT-TERM

-Deals with business goals set for the year

-Directs monthly and daily business operations.

-Work to accomplish long term planning



DEVELOPMENTAL PLAN

PARTS DEPARTMENT Date:

Objectives	Action Items	Priorities

IMPLEMENTATION PLAN
PARTS DEPARTMENT

(Only 1 Item Per Sheet)

Action Item Start Date______________

(From Operation Plan) Completion Date________

DATE	ACTIVITY	DATE	RESULTS

Note: Reevaluate your Original Plans and Action Items. Revise where necessary.

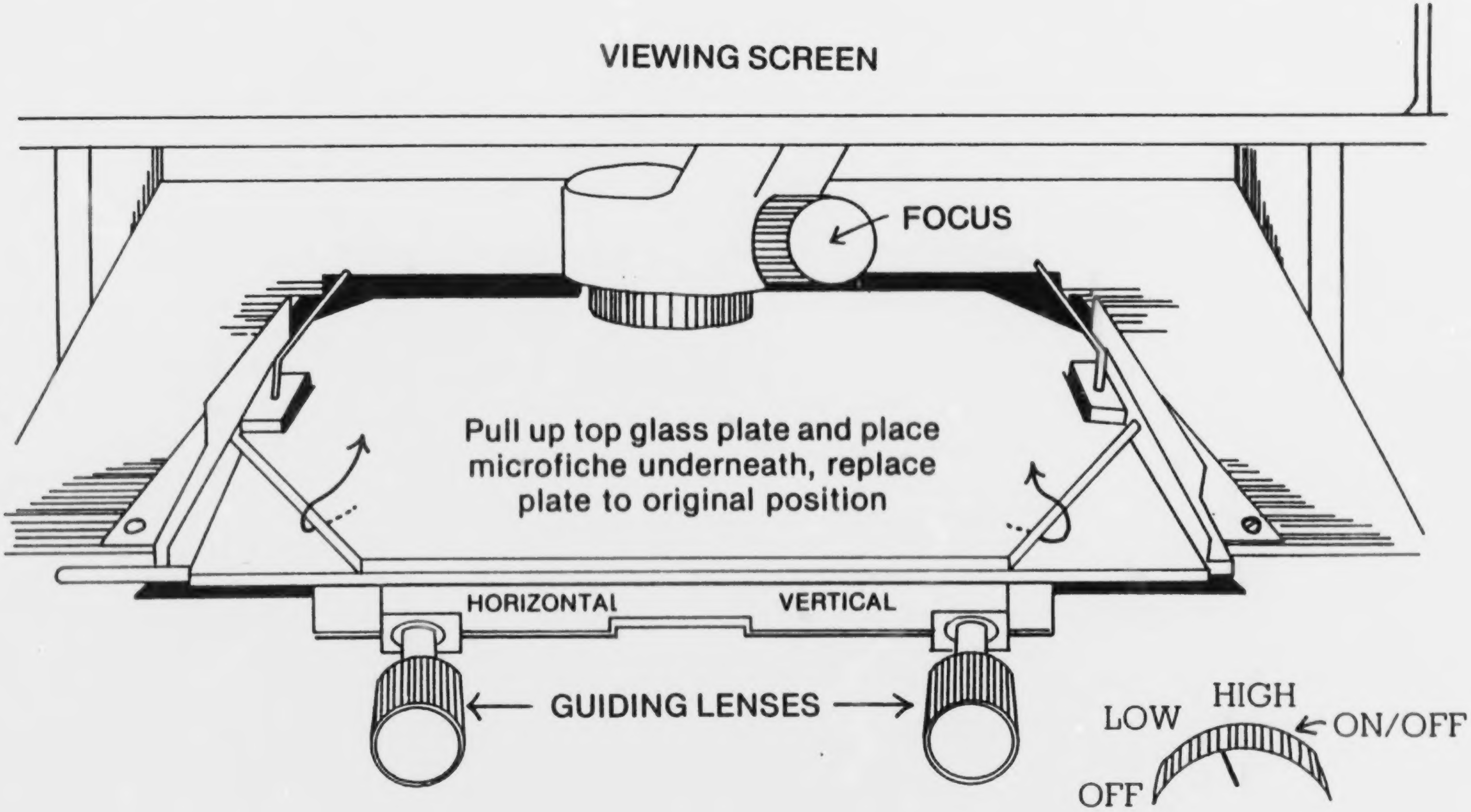
USING MICROFICHE

Loading microfiche into a microfiche viewer is a fairly simple operation. There are two main points to remember. One, the microfiche is placed between two plates of glass and is usually slid to the back of the bottom plate. This helps keep the fiche properly aligned. Two, the microfiche can be loaded four different directions and only one is correct depending on the type of viewer being used. Memorize the correct way for your viewer and it will make using the viewer much more efficient. After loading, the microfiche image can be moved to the index point, that point in which you want to start at, for example, a particular part number. The viewer will usually have a knob for adjustment of the light intensity on the screen. A good rule of thumb is to use the lowest light intensity you can and still have a good view. The dimmer the screen, the less tiring it becomes to the operator during long viewing sessions. Another good reason for using the lowest light intensity is that the bulb will last longer.

Special care is required for handling microfiche so that it can be kept as valuable records. The ideal temperature for storing microfiche is 70° and the humidity should be 25 to 40 percent. If the temperature and humidity are not controlled in the storage area, airtight containers are recommended. Some paper contains acids that, over time, will damage microfiche. The microfiche should be stored in envelopes that are made of acid-free material and stored in boxes or containers that are also acid-free. One microfiche per envelope so that two microfiche surfaces do not touch each other. The microfiche envelopes should be closely packed together in containers which help reduce damage from bending and keep air away from the surfaces. Handle all microfiche by the edges. Inspect each sheet before returning it to storage so that if there is damage a copy can be made or a new one ordered.

Proper maintenance procedures and care of equipment needs to be performed to guarantee long life and good service when it is needed. Special precautions must be taken when cleaning glass and especially lenses because they can be scratched and permanently damaged. Clean the glass plates and screen with a lint-free cloth or soft brush and a high quality glass cleaner. Clean the lens with a camel's-hair or sable brush, which are very soft, and use lens paper to wipe off smudges. Use mild detergent or soap and a damp cloth to clean other parts. Do not use abrasive cleaning agents or ones that leave a residue. The viewing equipment should be cleaned once a day or every time it is used if not used daily.

Parts of a Microfiche Viewer


VIEWING SCREEN
FOCUS
HORIZONTAL
VERTICAL
GUIDING LENSES
LOW
HIGH
ON/OFF
OFF

Pull up top glass plate and place microfiche underneath, replace plate to original position

PROBLEM AREA 6

WHAT ARE THE ACTIVITIES THAT ONE WOULD NEED TO KNOW TO SUCCESSFULLY OPERATE A SERVICE DEPARTMENT IN AN AGRICULTURAL EQUIPMENT DEALERSHIP?

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PROBLEM 6: What are the activities that one would need to know to successfully operate a service department in an agricultural equipment dealership?

INTEREST APPROACH:

The size, complexity, and price of today's machinery has made the quality of service one of the most decisive factors in the customer's decision to buy. Therefore, as the equipment availability improves, the customer can be more choosy in their choice of dealers. If the dealer has a service department that provides quality and timely work, then they have a distinct advantage over the competition.

But to get this kind of a service department requires a real personal commitment from everyone employed in the business. The service manager must be a manager, with all the authority and responsibility that title implies. The service, setup, and delivery personnel must all be skilled, properly trained, equipped, and motivated to do the job in the best way possible. How might the dealership work toward achieving these goals?

STUDY QUESTIONS:

1. What does the service department sell?
2. What are the characteristics of a typical service department?
3. What are the basic operational procedures of a service department?
4. What human relations skills are necessary for the service manager to successfully deal with customers and personnel?
5. What skills will the service personnel need to know in order to properly end a job?
6. What measures should one consider when managing the workflow of the service department?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To recognize inadequacies of the peer group and family without undue criticism. Student Learning Activity #4.

To accept a personal set of values and an ethical system to guide behavior. Student Learning Activity #3.

For career preparation. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve the students' ability to express his/her opinion in a clear and concise manner. Student Learning Activity #4.

Increase a student's speaking vocabulary. Student Learning Activity #2.

Strengthen the students' ability to explain clearly and efficiently. Student Learning Activity #4.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguishing between verifiable and value claims. Student Learning Activity #3.

Identifying ambiguous or equivocal claims or arguments. Student Learning Activity #2.

STUDENT LEARNING ACTIVITIES:

1. Define with students the purpose of the service department and its product. What does it sell? Have each student make a list of those characteristics that stereotype a poor service department in either an auto or equipment dealership. Discuss TM-1 and how service might be improved. Pass out and discuss INFO-2.

2. Have students read and complete ACT-3. Discuss questions.

3. Have students think of a manager, supervisor, or teacher they have dealt with (or observed) who made them feel excited about what they were doing and instilled confidence in their activities. How did they do it? If student's can't think of such an example, have them consider someone who they disliked working for. What were their characteristics? List those good and poor qualities using ACT-4.

4. Review INFO-5a and 5b with students. Break students into groups and present them with a description of a poor employee. List his/her basic characteristics on the blackboard. Also list those positive characteristics. With this information, have each group complete ACT-6. Students can make-up additional characteristics if they desire. Have each group present their results to the rest of the class. Evaluate and discuss the results of each group.

CONCLUSION:

Financial overview:

The service department sells time.

Cost of service sales is incurred whether or not the time is actually sold.

Characteristics of a service department:

Contains the largest number of employees.

Occupies the largest area.

Requires the most equipment.

Requires the greatest amount of employee training.

Is the most likely to be dealing with dissatisfied customers.

Is critical to the success of the dealership.

Operational procedures of the service department:

Customer contact:

Traditionally, they are customer initiated.

Other methods of attracting customers:

Promotions: during the off season the service department could advertise or offer special discounts for maintenance work.

Reminder calls: call and remind customers that it's time for certain maintenance to be performed, suggesting that they make an appointment.

Follow-up calls: many customers will mention service work that they will need done some time in the future. The service manager should call these customers to attempt to fix a certain time for the work, if possible, at a time that is most advantageous for the department.

Scheduling:

The key to scheduling lies in how the service manager keeps track of appointments; how they decides when to make an appointment; who they determine will do the job.

Record of appointments: the appointment should be recorded in such a way that if the manager is not in, the dealer (or anyone else) could find out which jobs were supposed to be done on which day.

Use a calendar to log all appointments.

Time considerations: an estimate of the amount of time the job should require, and how that repair might affect other departmental work should be considered.

Mechanic selection: with organization, the service manager can compare their work load requirement against the available personnel and develop a practical scheduling system. This gives the manager a good picture of how much work they have for each mechanic, where additional work can be scheduled, and how emergencies can best be handled when and if they arise.

Work orders:

A profit can only be made if all time allotted, and parts used on a particular job are properly charged to that job. This requires a work order system that is properly used. The work order should include the customer's name, address, and description of the problem. The elements of a work order are described in INFO-7a and 7b.

The job and the service personnel - indications of how well service personnel work:

Tools: if employees have to constantly hunt or borrow tools, then they will have a difficult time doing the job right and on time.

The service technician must notify the service manager if the original work order estimate is exceeded so that the customer can be notified and give authorization for the extra work and cost.

Work habits: look at the appearance of the mechanic's work area. Indications of quality work:

A clean work area

A clean set of tools

Ease of worker to be interrupted

Are they careful with parts and tools

Ability to get along with others

Relationship with other departments:

Time spent getting parts, accounts for a large percent of the mechanic's working time. This time can be decreased by having the mechanic look up all the parts ahead of time so they can be acquired all at once. Mechanic and technician must know how to use a microfiche viewer and printer.

Cooperation: the service and parts managers must work together.

Parts control: no part should leave the counter unless it is charged to a work order.

Time charges:

All time charges should be properly credited and billed to each other and every job, whether for a customer or internal work. Accurate time charges require strict use of the time clock with virtually no exceptions.

Time clock: gives an accurate record of time spent on each job, but also each employee's performance over time.

Human relations skills:

Remember, high quality personnel are the most critical aspect of a service department. No amount of top-flight equipment will make a service department good if its people are not.

Ways to evaluate the performance of personnel:

Measure customer satisfaction with service evaluation cards.

Measure customer satisfaction with follow-up calls to customers.

Look at the number of comeback problems of customers.

Ways to keep good service personnel:

Competitive wages

Good, safe, and fair working environment

Recognition for quality work and well developed skills

Room for professional growth and advancement

Supervision - the areas that the manager should focus attention on, become involved with, and how problems should be handled:

Two areas of concern in dealing with supervisory problems:

The magnitude of the problem

The frequency of the problem

How to handle problems:

Everyone should be looked at individually.

A successful outcome should be sought.

Considerations in problem solving:

People's feelings - don't criticize, yell at, or patronize people in front of others.

Give criticism in an evenhanded manner and give reasons for the criticism.

Ending the job:

"Work Order" totals: this job involves totalling out the charges on a work order and sometimes doing the warranty paperwork (something that often doesn't get done).

Many service managers hire a "clerk" to take care of these duties. The clerk not only frees up the service manager for other work, but also provides one more check on whether all charges have been entered. A thorough description of work performed should be written on the work order.

Checks: when the service manager checks the numbers, they perform several valuable functions:

Double checks that all charges have been entered.

Monitors the performance of the various service department employees.

Reviews the charges to identify where adjustments must be made before billing.

Billing: service personnel should be aware of how the billing process should be handled. They should be aware of:

Improper billing procedures.

Slow paying customers.

Parts used and entered on work orders can make the work done unprofitable.

Maintaining an even workflow:

Personnel: is the number of service personnel on hand justified. Typically the number of personnel is geared to those boom periods of time when the dealership is busy. Then during the slow periods, employees are idle, or take longer to do the same work. A job that takes eight hours during peak times can take ten to twelve hours during a slow period. With a little smoothing of the workflow, the same amount of work could be done with fewer employees.

Rule: The more qualified your service personnel, the fewer you will need.

Quality: generally, the overall quality of performance will generally decline as the time pressure increases. During peak seasons when quality is of the highest importance, as measured by not having to bring the equipment back for rework, the chances of error are highest. It's at these times that a smoothing out of the workflow becomes even more important.

Efforts to smooth workflow: some of the best techniques for smoothing out the workflow include sales promotions, off-season specials, and direct customer contacts.

EVALUATION:

Upon completion of this lesson, students will be able to:

Determine what the service department sells.

List the characteristics of a typical service department.

Identify the basic operational procedures of a service department.

Describe those human relations skills necessary for the service manager to successfully deal with customers and personnel.

List the skills service personnel need to know in order to properly end a job.

Identify the measures one should consider when managing the workflow of the service department.

OPTIONAL LEARNING ACTIVITIES:

Take students on a tour of a local agricultural equipment dealership. Invite the service manager of a local equipment dealership to speak to the class, or to simply attend one class session so that the students can interview him/her.

REFERENCES & INSTRUCTIONAL MATERIALS:

Agribusiness Procedures and Records, Lee/Lee, Chapter 1.

Agricultural Business Sales and Marketing: a Curriculum Material. Instructional Materials Laboratory, University of Missouri-Columbia, Columbia, Missouri. Catalog Number AG-51-1. June 1984.

Agricultural Business Sales and Marketing: a Curriculum Material.

SUPPLEMENTAL MATERIALS:

1986 Service Management Seminar Handbook: an instructional Material. Deere and Company, Service and Training Department, John Deere Road, Moline, Illinois 61265

Managing Parts & Service: Training Manual. Deere and Company, Service and Training Department, John Deere Road, Moline, Illinois 61265.

HINTS ON IMPROVING SERVICE DEPARTMENT PROFITABILITY

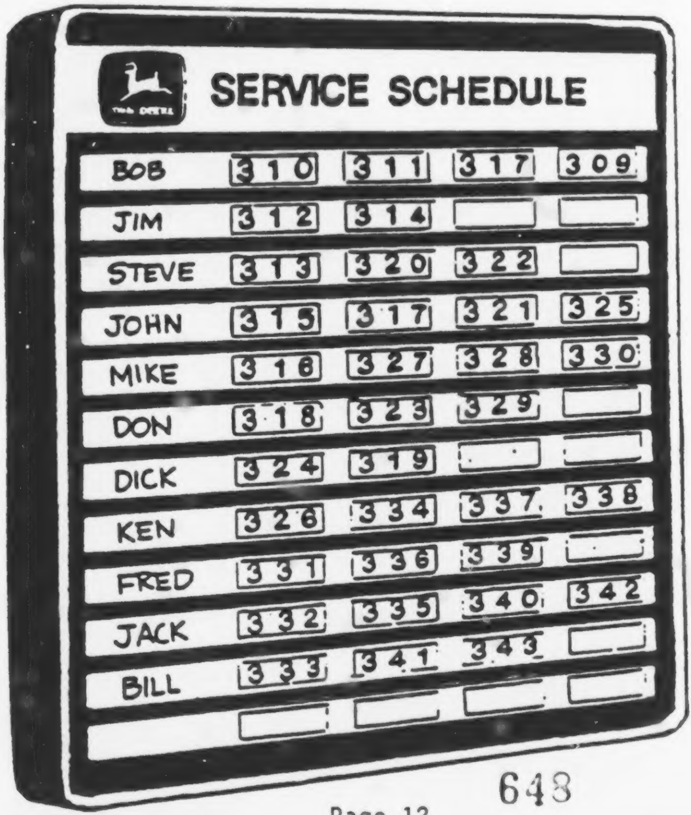
- SET A GOAL TO ACCOUNT FOR 100% OF ALL TECHNICIAN'S TIME
- USE TIME CLOCK
- HAVE TECHNICIANS LOOK UP THEIR OWN PARTS; CONSIDER MICROFICHE READER/PRINTER
- USE A WORK ORDER TO CONTROL ALL WORK DONE BY THE SERVICE TECHNICIAN
- HAVE YOUR SERVICE MANAGER USE A WORK ORDER CONTROL LOG TO KEEP TRACK OF WORK ORDERS
- USE A SCHEDULE BOARD TO SCHEDULE ALL TECHNICAL WORK
- KEEP EMPLOYEES INVOLVED; USE THEIR INPUT
- SET AND OBTAIN GOALS FOR SERVICE SALES THAT WILL ALLOW THE PROFIT POTENTIAL YOU REQUIRE
- MAKE A COMMITMENT TO REVIEW THE FINANCIAL RATIOS WITH YOUR EMPLOYEES SO YOUR TEAM CAN MAKE SOMETHING HAPPEN.
- MAKE A COMMITMENT TO "PLUG THE LEAKY HOLES" IN YOUR SERVICE DEPARTMENT.

SCHEDULE BOARD

The service manager cannot always be present to give work instructions to the technicians. When a technician finishes a machine or reaches a point where he is waiting for parts, in order to avoid unproductive delays, he must be able to begin another productive job immediately. A schedule board is very useful for showing technicians which job to begin next. It also helps the service manager stay organized in scheduling machines into the shop and assigning work to individual technicians. If the service manager is not present, the technician can clearly see on the schedule board which job to begin next.

The schedule board should be located in the service manager's office where he has easy access to making daily changes to the board. If possible, the board should be located where it is visible to the technicians without them having to enter the office. This will save time and avoid delays if the service manager is busy with someone in his office.

The schedule board should list the next jobs to be started, by work order, per technician.



SERVICE SCHEDULE

BOB	310	311	317	309
JIM	312	314		
STEVE	313	320	322	
JOHN	315	317	321	325
MIKE	316	327	328	330
DON	318	323	329	
DICK	324	319		
KEN	326	334	337	338
FRED	331	336	339	
JACK	332	335	340	342
BILL	333	341	343	

Joe Spangler: Manager

Joe Spangler, had been the Service Manager for the Cooper Implement Company for about three years. Joe had requested a meeting with his boss, Henry Cooper, to discuss some ideas he had for improving return-on-service labor in the department. The meeting, followed by several weeks a previous meeting in which Cooper, who was the owner and general manager, had complained to Joe about some problem areas in the service department. Joe had at first been a bit surprised that his boss saw so many problems. Then, he became upset. But, as he thought about it, he realized that there really was room for some improvement. He had set up this meeting with his boss to go over his new ideas. "After all," he thought, "It is to my advantage to try and help Henry make money in the shop."

After listening to Spangler's recommendations for improving operations in the service department, Cooper responded, "you've got some good ideas, Joe. If you can improve off-season service sales through a marketing campaign and get your people to understand the importance of accurate time charges, we should have a great year."

"I think I can do it," Spangler replied. "My only concern is time. You know the hours I'm putting in now. Well, unless I can get some of the paper work burden taken off my back, I don't know how fast I'll be able to implement these improvements. You know, it might be a good investment to hire another mechanic. A service department clerk wouldn't hurt either!"

Cooper thought for a moment before replying. "Believe me, Joe, I know how hard you're working. You can turn a wrench with the best of them. But I'm not all that certain that another mechanic is the answer. Most of the time, your technicians, set-up people and drivers seem to be underworked. They're just sitting back and letting you carry the load. It seems like you try to do most of the work orders, almost all the training, plus handling quite a number of repair jobs yourself. Frankly, you might be trying to do too much."

The dealer's assessment of his management abilities obviously hurt Spangler. However, it prompted him to launch into an agitated description of the troubles he'd been having with some of his new mechanics. "Even with good pay there's no loyalty or commitment to work any more. As far as motivation and initiative are concerned, these guys never heard of it! Most of them aren't interested in anything else than getting their fingernails dirty. They don't seem to care about productivity and that kind of stuff."

"Let me ask you something," Cooper interrupted. "Have you ever tried to give your people a real challenge . . . brought them in to help you with some of the problems you are having with the department . . . something that will stimulate and create a sense of teamwork?"

Questions:

1. What is your opinion of Spangler as a manager?
2. What could Spangler do, if anything, to improve the situation?
3. What do you think about Cooper's suggestion?
4. No matter what department he works in, Parts or Service, what should the primary responsibilities of a manager be? Make a list yourself and discuss it with your team members.
5. As a group, on a piece of paper, develop a list of general items which could be the responsibilities of either a Parts Department or a Service Department manager.

Departmental Management Issues

Supervision

Good Managerial Qualities	Poor Managerial Qualities
1. ____________________	1. ____________________
2. ____________________	2. ____________________
3. ____________________	3. ____________________
4. ____________________	4. ____________________
5. ____________________	5. ____________________
6. ____________________	6. ____________________
7. ____________________	7. ____________________
8. ____________________	8. ____________________
9. ____________________	9. ____________________
10. ____________________	10. ____________________

PLANNING FOR IMPROVEMENT

Action Planning

Analyzing performance gaps, giving feedback, and selecting appropriate motivators will make a difference. But, you cannot change someone without their cooperation. To have a long-term effect on the productivity and profitability of your employees, you need to do some action planning with them.

The Skill Of Planning For Improvement

Action planning is a two-way discussion between the manager and the employee to:

- Agree on an area needing improvement
- Agree on a plan for improvement
- Help the employee implement the plan

It is the final step of training, coaching, or counseling your employees.

Training, Coaching And Counseling Cycles

When employees lack the skills or knowledge to perform at standard, you need to arrange for training and/or coach them. Anytime you hire a new employee or change the job responsibilities for existing employees, training is probably needed. The training cycle (outlines on the chart on the next page) may be a formal session (such as the one you are experiencing now) or an informal, on-the-job method of learning new skills or knowledge.

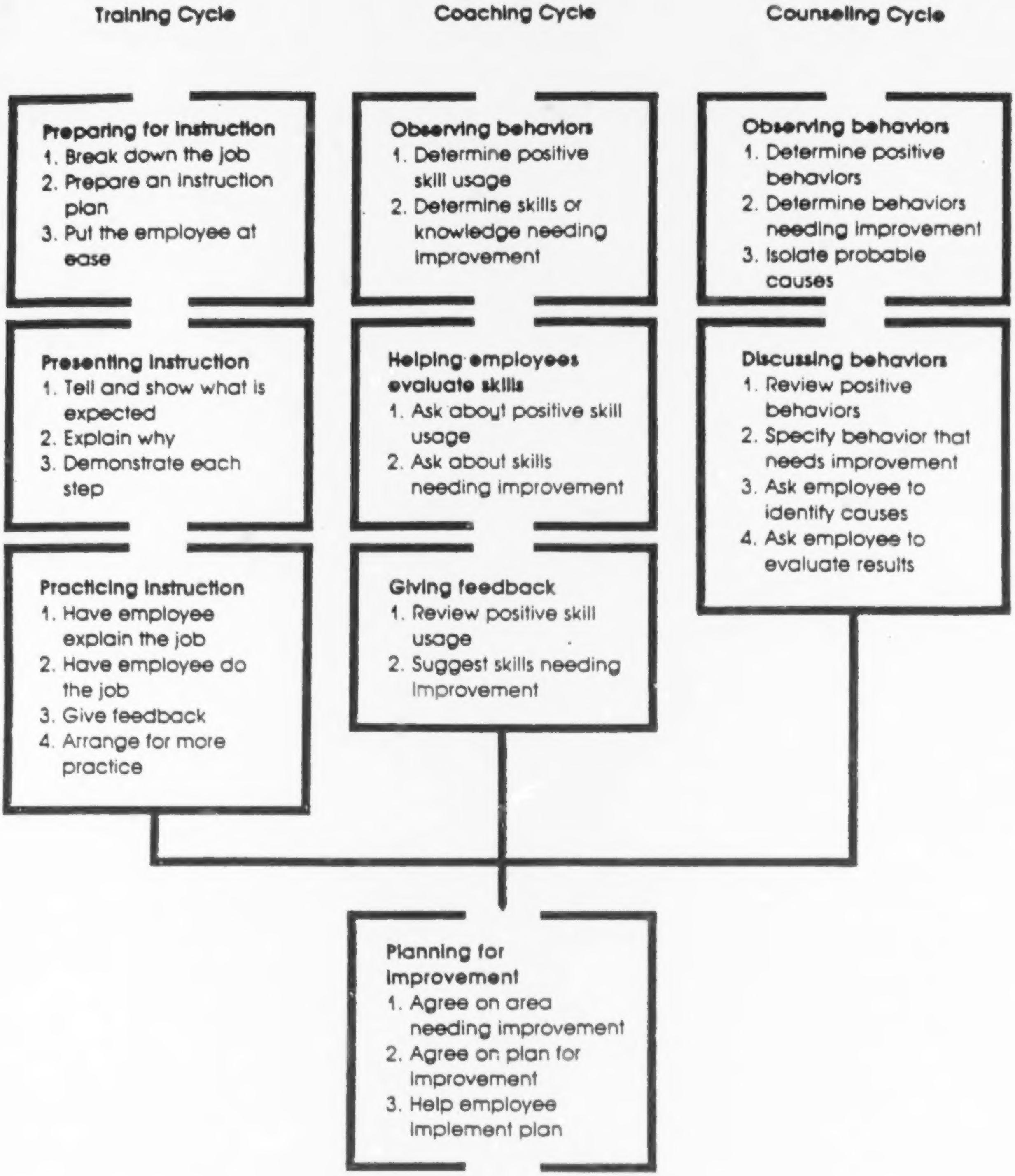
Coaching

Coaching is an active process of observing and improving employees' behaviors after they have been trained. For example, if your technician participated in the Hydraulic Diagnostic School, you need to reinforce those skills through on-the-job coaching.

Counseling

Counseling is not identical to coaching. Coaching involves enhancing employees' skills and knowledge. Counseling, on the other hand, involves dealing with employees who don't want to perform because of poor motivation, negative attitudes, personal problems, etc.

While training, coaching, and counseling have different skill models (see the chart on the next page), all conclude with planning for improvement - the skill you'll be learning in these final activities.



Training Cycle

Preparing for Instruction
1. Break down the job
2. Prepare an instruction plan
3. Put the employee at ease

Presenting Instruction
1. Tell and show what is expected
2. Explain why
3. Demonstrate each step

Practicing Instruction
1. Have employee explain the job
2. Have employee do the job
3. Give feedback
4. Arrange for more practice

Coaching Cycle

Observing behaviors
1. Determine positive skill usage
2. Determine skills or knowledge needing improvement

Helping employees evaluate skills
1. Ask about positive skill usage
2. Ask about skills needing improvement

Giving feedback
1. Review positive skill usage
2. Suggest skills needing improvement

Counseling Cycle

Observing behaviors
1. Determine positive behaviors
2. Determine behaviors needing improvement
3. Isolate probable causes

Discussing behaviors
1. Review positive behaviors
2. Specify behavior that needs improvement
3. Ask employee to identify causes
4. Ask employee to evaluate results

Planning for improvement
1. Agree on area needing improvement
2. Agree on plan for improvement
3. Help employee implement plan

Your Performance Challenge

Getting Agreement

Whether you are training, counseling, or coaching employees, you need to involve them in the process of change. Unless you do, they will continue to perform at a low level. And, the goals you set for the technicians won't matter to them until these goals become their personal goals.

But, how can you and your employee agree on a plan? For example, assume that you want Pat to improve his efficiency (saleable time) but he wants to work on designing shop fixtures. Giving in to an employee's views (or forcing your views on them) is not agreement.

Self-Study Exercise

Before trying to "get things done" through this person, you need "think time" to:

- Analyze the performance gap.
- Understand their motivational patterns.

Analyze The Performance Gap:

Begin by describing, specifically, what's the matter:

- What do you expect?

  ____

- What specifically does the employee say/do?

  ____

- What are the results?

  ____

You should be able to answer yes to the following questions except the question, "Does the employee know how?"

• Is it important?	( ) Yes	( ) No, then ignore it.
• Is employee aware of problem?	( ) Yes	( ) No, then give feedback.
• Does employee know how to solve it?	( ) Yes	( ) No, then train or coach.
• Does employee want to solve it?	( ) Yes	( ) No, then counsel.
• Does employee have potential?	( ) Yes	( ) No, then reassign or terminate.

If you think this employee's problem is not one that can be fixed through training, practice, or coaching, select another employee and repeat this process.

Work Order Process	**Elements**
Opening of Work Order	• Identify: - Customer/Machine Information - Repair Instructions to Technician (on Service Technician Instructions Sheet after removing) • Schedule: - on schedule board assign Work Order (by number) to appropriate technician - place technician Instruction Sheet in work order rack for technician access • Retain: - all other copies in Service Manager's office
Work In Process	• Description of Work performed: - technician to identify on Technician Instruction Shee • Labor Hours consumed - to be posted from previous day's job time cards to Work Copy by service clerk on daily basis • Parts Requisitions to be collated and attached to respective Work Order (the part numbers/description can be transposed to Work Order - or - identify Requisition Number on Work Order and attach copies for customer and accounting department reference.
Closing Work Order	• Initiated by technician turning in completed Technician Instruction Sheet • Verify that: - all labor has been posted - all parts used have been identified for billing • Total all labor entries, parts/materials used, and vehicle charges as appropriate - post to Original Customer, Billing, and Service Information copies • Transfer description of 'Work to be done' and 'Work Performed' from Service Technician Instruction Sheet to Original, Customer, Billing, and Service Information copies • Post to Service Department Labor control, hours worked by respective technician(s)

Process	Elements
Closing Work Order (cont'd)	• Submit Original, Customer, and Billing copies to Accounting Department for billing (suggest that Accounting file original copy numerically). • Attach Technician Instruction Sheet and Service Information copy to Work Copy, and file in Service Department by customer. • Post date closed on Work Order Control Log.

Service Department Efficiency Report

Process	Elements
Period Close-Out	• Post Technician Performance Date from Service Department Labor Control - Technician Name - Hours Charged • From payroll records - Hours Worked • Calculate Percent Recovery - Hours Charged ÷ Hours Worked • Post Delivery/Service Vehicle mileage charges

Livestock Sales and Service

PROBLEM AREA 1

HOW IS PROFITABILITY OF A LIVESTOCK SALES AND SERVICE BUSINESS DETERMINED?

Contents

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PROBLEM 1: How is profitability of a livestock sales and service business determined?

INTEREST APPROACH:

Arrange to have a manager of a local feed store or elevator to speak to the class. Ask that this person identify and discuss factors that make a business profitable and factors that cause a feed business to operate at a loss. Have students list these factors. Provide the class with several profit and loss statements from feed stores for previous years. Have students analyze these statements using the lists developed while listening to the feed store manager. Discuss their findings and identify where improvement in management would have created a better profit picture for the feed stores who provided past profit and loss statements.

STUDY QUESTIONS:

1. What items are necessary to calculate a profit and loss statement?
2. What items are needed to calculate a balance sheet for a company?
3. Why is it important to have an up-to-date inventory and how would one go about keeping inventory records?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To participate in the planning of one's own activities. Student Learning Activity #3.

For assurance of economic independence. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Teach how to convert units of measure. Student Learning Activity #2.

Provide instruction on the use of decimals (addition, subtraction, division, multiplication). Student Learning Activity #2.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguishing between verifiable facts and value claims. Student Learning Activity #1.

Develop problem solving skills for making intelligent decisions. Student Learning Activity #3.

LEARNING ACTIVITIES:

1. Using TM-1, 2 and 3, explain what a profit and loss statement is and what items are included on it. After discussing these items, hand out the sample profit and loss sheet (ACT-4) for students to complete.
2. Using TM-5, explain the contents of a balance statement. Hand out the balance sheet problem and the balance sheet for students to complete (ACT-6a and 6b).
3. Review and discuss what inventories are, the types of inventories, and the content of inventories (TM-7 and 8). Hand out ACT-9, 10, and 11 for students to complete. Discuss with the students how each of the activities are used in livestock service and sales businesses. Review TM-12 with the students and have

students inventory the agriculture department laboratory following the outline in TM-12.

CONCLUSION:

The agricultural business operating statement.

The operating statement, sometimes called a "profit and loss statement," is a summary of operations for a given period of time. These statements are prepared either annually, semiannually, quarterly, or monthly, whichever is desired for best results. The statements are usually prepared for a uniform length of time to enable the opeation to make comparisons and analysis among stores, a group of departments, or one department against another. The main purpose of these statements is to list the income and expenses for a given period of time so that the net income can be determined. For example, the net income from the year's operations is needed in reporting federal and state income taxes.

Such statements include all revenue from sales, "other" revenue, and all expenses. The gross revenue is a total of all income coming into the business; the gross selling margin is the difference between the sales and the cost of the commodities sold; the gross margin is the gross selling margin, plus the income from "other" revenue; and the net income (or net loss) is the difference between the gross margin and the business expenses. This figure is very important to the future of the business.

The balance sheet.

The balance sheet, sometimes referred to as a net worth statement, shows the value of the business assets and debts or liabilities of the business. It also includes the net worth or the equity in the business. Unlike the operating statement which covers a period of time, the balance sheet shows the "condition" of the business on a specific date, such as December 31.

Current assets.

Current assets include the cash and those assets that will be converted into cash during the normal operations of the business, or sold on credit. Accounts receivable are credited for those assets sold for credit if the customer usually pays with cash. Thus, accounts receivable represent another asset usually listed on the balance sheet. Notes receivable, also, normally appear among the current assets. These may have been taken from customers whose accounts have become overdue. By having a promissory note, the retailer has written evidence of the debt and a definite agreement of the customer to pay by a given time.

Fixed assets.

Fixed assets are not converted into cash in a normal operation of a business. They are used in conducting business for the company. Examples of fixed assets are furniture, fixtures, equipment, buildings, and land.

Current liabilities.

The current liabilities are obligations or debts which normally must be paid by the business within one year. Current liabilities usually represent debts for merchandise, taxes, wages, and interest.

Fixed liability.

A fixed liability is a long-term liability, such as a mortgage on a store building or a land site. These are usually due one year or more in the future. They may be paid in monthly or annual installments. Arrangements should be made in advance for payment plans for fixed liabilities.

Net worth or equity.

The net worth or equity is the difference between the total value of the assets and the liabilities of the business.

The total value of current assets is sometimes called gross working capital; net working capital is the difference between current assets and current liabilities. The current assets are used to produce the profit of the business. The fixed assets are used to perform operations to produce the profits for the business.

Inventory.

The quantity of merchandise (whether raw or furnished) in the agribusiness' possession.

The inventory can include both products and fixtures or machines.

Perpetual inventory.

The process of keeping a daily record of items received and shipped. This record is kept in writing on paper, computer disk, or other retrievable source.

Sometimes called the balance-of-stores record.

The record usually includes the following information:

Description of items.

When more should be ordered.

Quantity to be ordered.

Dates on which inventory change.

Quantity of changes.

This type of inventory helps to keep agribusinesses informed of exactly what inventory is on hand.

The main disadvantage is that it does not show losses from theft and damage.

Physical inventory.

Taking an actual count of inventory on hand.

Done at regular intervals.

Gives an accurate account of what is on hand.

Needed for tax and insurance purposes.

The main disadvantage is that it takes time and disrupts regular business.

Control of inventory (to keep the right amount of goods on hand).

Following are factors managers consider to control inventory:

Customer needs.

Down-buying.

Seasonal demands.

Past inventory records.

Trends in supply and demand.

Current inventory.

Inventory control is closely related to profitability of an agribusiness and is dependent on the following:

Purchasing: Which is dependent on how much is needed or can be sold.

Production: How many supplies you need to create goods and services.

Storage: Limited by the storage available for items.

Marketing: What potential sales are expected to be.

Financing: Large inventories tie up many dollars.

Taking a physical inventory.

Inventory everything owned by the agribusiness.

Taxes and insurance amounts are based on physcial inventory.

The inventory usually involves all the personnel in counting and recording items.

What information is needed on the physical inventory sheet:

Date of inventory.

Description of items.

The actual count.

Unit in which price is listed (each, box, etc.).

Number of units.

Cost per unit to the agribusiness.

Total cost of units on hand.

Total amount of all inventory.

Noting the condition of merchandise can also be done while taking the physical inventory.

EVALUATION:

Upon completion of this lesson, students will be able to:

Complete a profit and loss statement and interpret its meaning.

Complete a balance sheet and define the terms involved with a balance sheet.

Prepare an inventory for a company and keep track of the transactions as they occur.

OPTIONAL LEARNING ACTIVITIES:

Have students visit an elevator and have the manager present the previous years profit and loss statement and the balance sheet and explain how it is used to enhance the company.

REFERENCES AND INSTRUCTIONAL MATERIALS:

Agribusiness Procedures and Records. Lee/Lee. Chapter 1.

Agricultural Business Sales and Marketing: a Curriculum Material. Instructional Materials Laboratory, University of Missouri-Columbia, Columbia, Missouri. June 1984. Catalog Number AG-51-1.

SUPPLEMENTAL MATERIALS:

Farm and Ranch Business Management: an Instructional Material. Deere and Company, Service and Training Department, John Deere Road, Moline, Illinois 61265.

A PROFIT AND LOSS STATEMENT

IS:

A SUMMARY OF OPERATIONS FOR A GIVEN

PERIOD OF TIME

A PROFIT AND LOSS STATEMENT INCLUDES:

Revenues from sales

Other revenue

All expenses

USE PROFIT AND LOSS STATEMENT TO DETERMINE:

GROSS REVENUE--total of all income recieved.

GROSS SELLING MARGIN--the difference between sales and cost of commodities sold.

GROSS MARGIN--the gross selling margin plus income from other revenue.

NET INCOME (OR NET LOSS)--the difference between gross margin and business expenses.

PROFIT AND LOSS STATEMENT

SITUATION: New Ag Elevator is analyzing the incomes and expenses from the previous year. It is important to see now profitable the company has been over the previous year.

ASSIGNMENT: Using the following information, fill in the profit and loss statement to determine the company's net income.

Total sales	$1,562,702.44
Cost of commodities	1,476,315.27
Grinding	8,720.44
Storage	10,865.33
Dividends	672.31
Increase in inventory	2,300.34

Expenses:

Salaries and wages	$41,334.75
Heat, power, and water	4,597.97
Plant maintenance	3,737.88
Insurance	4,005.00
Interest	1,025.75
Telephone	728.43
Taxes	7,532.14
Advertising	1,800.00
Depreciation	12,216.32
Miscellaneous expense	700.21

NEW AG ELEVATOR

PROFIT AND LOSS STATEMENT
For Year Ending December 31, 1987

Sales $__________

Less commodities sold __________

Gross selling margin $__________

Other revenue

Grinding, cleaning, etc. __________
Storage and handling __________
Dividends, patronage refunds __________

Total $__________

(Less) Inventory change (__________)

Gross Margin $__________

Expenses
Salaries and wages $__________
Utilities __________
Repairs __________
Insurance __________
Interest __________
Telephone __________
Taxes __________
Advertising __________
Depreciation __________
Misc. expense __________

Total expenses __________ $__________

NET INCOME $__________

A BUSINESS BALANCE STATEMENT INCLUDES:

Assets

- Current
- Intermediate
- Fixed

Liabilities

- Short term
- Intermeidate
- Fixed

Net Worth or Equity

670

BALANCE SHEET

SITUATION: New Ag Elevator is developing its balance sheet. The management wants to know the current financial situation of the business.

ASSIGNMENT: Given the items below, put the items in their proper categories and calculate the company's net worth.

Cash on hand	$13,450
Accounts receivable from customers	7,200
Inventory of products	34,350
Furniture and equipment	10,750
Unexpired insurance	300
Building and land	32,000
Accounts payable	13,750
Notes due on equipment within the year	4,200
Accrued taxes, interest and wages	2,500
Remaining note on land	10,000

BALANCE SHEET
December 31, 1987

Assets

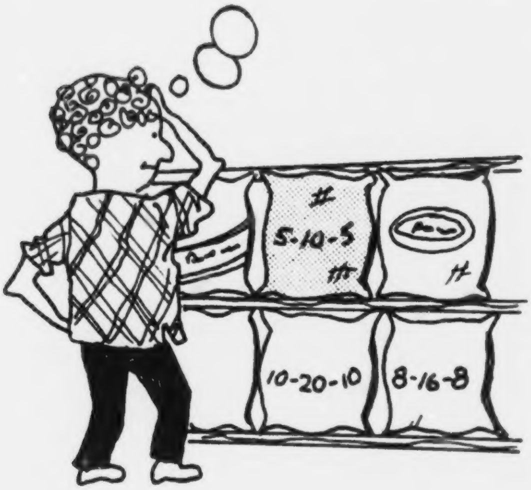
Current Assets			
Cash	$________		
Accounts receivable	________		
Inventory of products	________		
Total current assets	$________	$________	
Fixed Assets:			
Office equipment	$________		
Unexpired insurance	________		
Building	________		
Total fixed asset	$________	$________	
TOTAL ASSETS		$________	$________

Liabilities

Current Liabilities:			
Accounts payable	$________		
Notes payable	________		
Accrued taxes, interest, and wages	________		
Total current liabilities	$________	________	
Fixed Liabilities:			
Note remaining on building	________	________	
Total liabilities		________	________
NET WORTH			$________

Inventory is:

The quantity of merchandise in the agribusinesses possession. It includes both products and fixtures or machines.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8-16-8

TYPES OF INVENTORIES:

PERPETUAL

--a daily record of
items received and sold

PHYSICAL

--actual count of
merchandise on hand

ACT-9

END OF MONTH PHYSICAL INVENTORY

On June 30, employees inventoried the merchandise on hand at the Spillville Feed Store. The results of their inventory is listed below. Complete the number of units and amount columns.

Actual Count			Description of Items	Unit	No. of Units	Unit Cost		Amount	
		(67,200#)	No. 2 Shelled corn	Bu.		$ 1	15		
		(9,600#)	Oats	Bu.			70		
			Feed						
	1000#	1400#	Beefmaker	Ton		92	00		
	2000#	1800#	Porkmaker	Ton		104	00		
		1,500#	Dairy Supplement	Ton		95	00		
1000#	2000#	1000#	Soybean Meal	Ton		70	00		
		2100#	Linseed Meal	Ton		80	00		
	2000#	1200#	Bran	Ton		42	00		
		24	50# Mineral	50#		1	85		
		30	50# Calf starter	50#		2	45		
		23	Salt Blocks	ea.			80		
			Fertilizer						
		124	50# Sacks 6-24-12	Ton		58	50		
		320	50# Sacks 5-20-20	Ton		61	00		
		24	100# Sacks 33-0-0	Ton		88	00		
			Seed						
		310#	Ryegrass Seed	lb.			12		
		24#	Lawn Seed	lb.			75		
		18 bu.	Seed Corn	Bu.		9	00		
			Chemicals						
	14		1 Gal. 2-4-D	Gal.		2	45		
	8		5 Gal. 2-4-D	ea.		11	50		
	20		2# box Rose Dust	ea.		1	10		
	12		5# box Vegetable Dust	ea.		2	20		
	16		5# bags Atrazine	ea.		11	00		
	8		1 qt. Household Fly Spray	ea.			80		
			Oil & Grease						
28			1 qt. Motor Oil	ea.			42		
18			1 Gal. Motor Oil	ea.		1	55		
24			1# Lube Tubes	ea.			32		
			Twine						
64			Bales - Baler Twine	ea.		8	60		

Total____________

Determinine Selling Price of Merchandise

July 1, The Spillville Feed Store merchandise selling prices changed due to changes in mark-up on the merchandise. Using the End of Month Physical Invetory unit costs, determine the new selling prices for the merchandise listed below. The mark-up percentages are provided below.

Fertilizer	14%	Seed	15%
Grain	8%	Twine	20%
Feed	20%	Chemicals	25%

Oil and grease 20%

GRAINS:

Shelled corn (cwt)------- ______
Oats (cwt)-------------- ______

FEEDS:

Beefmaker (cwt) -------- ______
Porkmaker (cwt)-------- ______
Dairy supplement (cwt) -- ______
Soybean meal (cwt)------ ______
Linseed meal (cwt)------ ______
Bran (cwt) ------------- ______
Mineral 50#------------ ______
Calf starter 50# -------- ______
Salt blocks, each ------- ______

FERTILIZER:

6-24-12 -- per ton ------ ______
5-20-20 -- per ton ------ ______
33-0-0 -- per ton ------ ______

Grinding - per cwt ------ .15
Shelling -- per cwt ------ .08
(ear corn)

SEEDS:

Rye grass --- per # ------ ______
Lawn seed --- per # ------ ______
Seed corn---- per bu ----- ______

CHEMICALS:

2-4-D ------- 1 gal ------- ______
2-4-D ------- 5 gal------- ______
Rose dust---- 2# box ----- ______
Vegetable dust 5# box ----- ______
Atrazine----- 5# bag ----- ______
Household fly spray 1 qt. -- ______

OIL AND GREASE:

Motor oil ---- 1 qt -------- ______
Motor oil ---- 1 gal ------ ______
Lube tubes --- 1 # -------- ______

Twine ------- bale ------- ______

Preparing the Perpetual Inventory

The Sloan Feed Store had the following sales of merchandise during the month of September. Post these transactions to the Perpetual Inventory.

Date	Transaction
1	300# shelled corn 600# beefmaker 200# shelled corn 500# soybean meal 1 bale twine
2	200# porkmaker 800# shelled corn 1 ton porkmaker 800# soybean meal 2 bu. alfalfa seed
3	500# shelled corn 600# soybean meal 1000# shelled corn 400# soybean meal 2 bales twine 12,000# shelled corn (In)
4	1 ton beefmaker 500# beefmaker 1 ton soybean meal 800# soybean meal 2 bu. alfalfa seed
5	2 ton shelled corn 1 ton soybean meal 2 ton porkmaker (In) 5 ton beefmaker (In)
8	16 bales twine 800# shelled corn 300# porkmaker 600# soybean meal 500# soybean meal 3 bu. alfalfa seed
9	5 tons soybean meal (In) 600# soybean meal 500# beefmaker 10 bales twine
10	1600# beefmaker 1200# shelled corn 500# porkmaker 700# shelled corn 900# soybean meal 50 bales twine (In) 10 bu. alfalfa seed (In)
11	300# porkmaker 200# beefmaker 20 bales twine 2 tons shelled corn 1 bu. alfalfa seed 10,500# shelled corn (In)
12	4500# shelled corn 500# porkmaker 500# soybean meal 800# soybean meal
15	600# beefmaker 800# porkmaker 500# soybean meal 1200# beefmaker 100# soybean meal
16	10 bales twine 500# shelled corn 600# soybean meal
17	1 ton soybean meal 1 ton porkmaker 2 tons shelled corn 5 bales twine 3 bu. alfalfa seed 8000# shelled corn (In)
18	10 bu. alfalfa seed (In) 700# soybean meal 500# beefmaker 900# shelled corn 400# porkmaker 6 bales twine
19	3600# shelled corn 1000# shelled corn 1000# soybean meal 1000# beefmaker 3 ton beefmaker (In) 3 ton porkmaker (In)
22	2200# shelled corn 10 bales twine 1500# porkmaker 1000# soybean meal 500# shelled corn 6 bales twine
23	1 ton porkmaker 1800# shelled corn 500# porkmaker 600# beefmaker 1 ton soybean meal
24	1700# shelled corn 500# soybean meal 1000# porkmaker 500# beefmaker 5 tons soybean meal (In)
25	10 bales twine 1000# shelled corn 2500# soybean meal 2 bu. alfalfa seed
26	2 ton beefmaker 1000# porkmaker 300# shelled corn
29	1800# porkmaker 1600# shelled corn 500# soybean meal 2 bales twine
30	600# soybean meal 1000# porkmaker 500# beefmaker 2 bu. alfalfa seed

Perpetual Inventory

BEGINNING OF THE MONTH BALANCE

date	Shelled Corn			Beefmaker			Porkmaker			Soybean Meal			Twine			Alfalfa Seed		
	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.
	Beginning balance		9000#			4000#			6000#			9800#			50			12
1																		
2																		
3																		
4																		
5																		
6																		
7																		
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28																		
29																		
30																		
31																		

STEPS IN TAKING AN INVENTORY:

Record date of inventory

Describe items

Count the number of items

Describe the condition of the merchandise

PROBLEM AREA 2

WHAT STEPS ARE TO BE CONSIDERED WHEN SCHEDULING FEED DELIVERIES DURING A WORKING DAY?

Contents

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Teaching Outline....................1

INFO-1 Finding a Farm or Piece of Property In a County Soil Survey Report....................5

ACT-2 Defining Property Legally....................9

ACT-3 Legal Descriptions....................10

ACT-4 Truck Usage....................12

TM-5 Factors to Consider When Making a Delivery Schedule....................15

PROBLEM 2: What steps are to be considered when scheduling feed deliveries during a working day?

INTEREST APPROACH:

Have students list the number of times that they feed their SOE projects and the amount of feed that they order at one time. Collect the sheets from the students and have them proceed through a step by step process of the delivery of feed if each student needed feed on the same day.

STUDY QUESTIONS:

1. How would a new employee find the place to deliver the feed order?
2. How would an individual develop a delivery schedule for feed delivery to several customers?
3. What factors determine the delivery schedule?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To make intelligent decisions. Student Learning Activity #1.

For human relations and communicative skills. Student Learning Activity #1.

For mature intellectual functioning. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Problem solving on information to be presented. Student Learning Activity #3.

Improve students' writing and spelling skills. Student Learning Activity #1.

Improve the students' ability to operate a computer and enter information. Student Learning Activity #1.

Improve the students' ability to express his/her opinion in a clear and concise manner. Student Learning Activity #1.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguishing between warranted and unwarranted claims. Student Learning Activity #1.

Distinguishing relevant from irrelevant information, claims, or reasons. Student Learning Activity #1 and 3.

Interpretation and evaluation of facts. Student Learning Activity #1.

LEARNING ACTIVITIES:

1. Have students bring plat books to class and locate each of the classmates farms or houses. Hand out INFO-1 and ACT-2 for students to complete. Discuss legal descriptions with the students. Use ACT-3 to test their knowledge.

2. Using ACT-4, have students schedule a feed delivery route using the plat in ACT-3a and 3b. Discuss problems that may arise in feed delivery scheduling.

3. Have students list the procedures in developing a delivery schedule if they were a delivery person. Use TM-5 to summarize their lists.

CONCLUSION:

There are several sources to help locate where customers live.

Plat books are an important tool in locating customers for beginning employees. Also employees who have worked with customers for a long period of time will help in locating the delivery site. Using the feed order form should also assist in giving directions to the farm.

The individual must consider several factors before a delivery is scheduled.

Time the order is to be delivered

Location of the various customers that are on the delivery route.

Size of the feed order and the size of the bulk truck

Type of feed and medication used in the feed

Several procedures must be followed to ensure a satisfied customer.

The employee should be sure all gates are securely fastened before leaving.

The employee should be sure all feeder lids are securely fastened to prevent rain from entering.

The last area is to give the customer the receipt and have the person sign the receipt if there is not a check to be picked up.

EVALUATION:

Upon completion of this lesson, students will be able to:

Use a plat book to locate farms and be able to give the legal descriptions of the farms.

List steps in scheduling a feed delivery and problems that may arise in scheduling.

List steps to perform once the feed is delivered to insure a satisfied customer.

OPTIONAL LEARNING ACTIVITIES:

1. Visit a elevator and tour the feed mill and observe procedures used in scheduling feed orders.
2. Visit a local elevator and observe the various jobs that are available in the feed and livestock industry.

REFERENCES AND INSTRUCTIONAL MATERIALS:

Butler County Platte Book, (1986), Farm and Home Publishers, Ltd.

Joe's Feed and Seed Curriculum (1986)

FINDING A FARM OR PIECE OF PROPERTY IN A COUNTY SOIL SURVEY REPORT

Property in Iowa is owned according to a precise system of rectangular survey. The deed to a property must have a legal description of that property. The legal description is a unique name. There is no other piece of land with the same description.

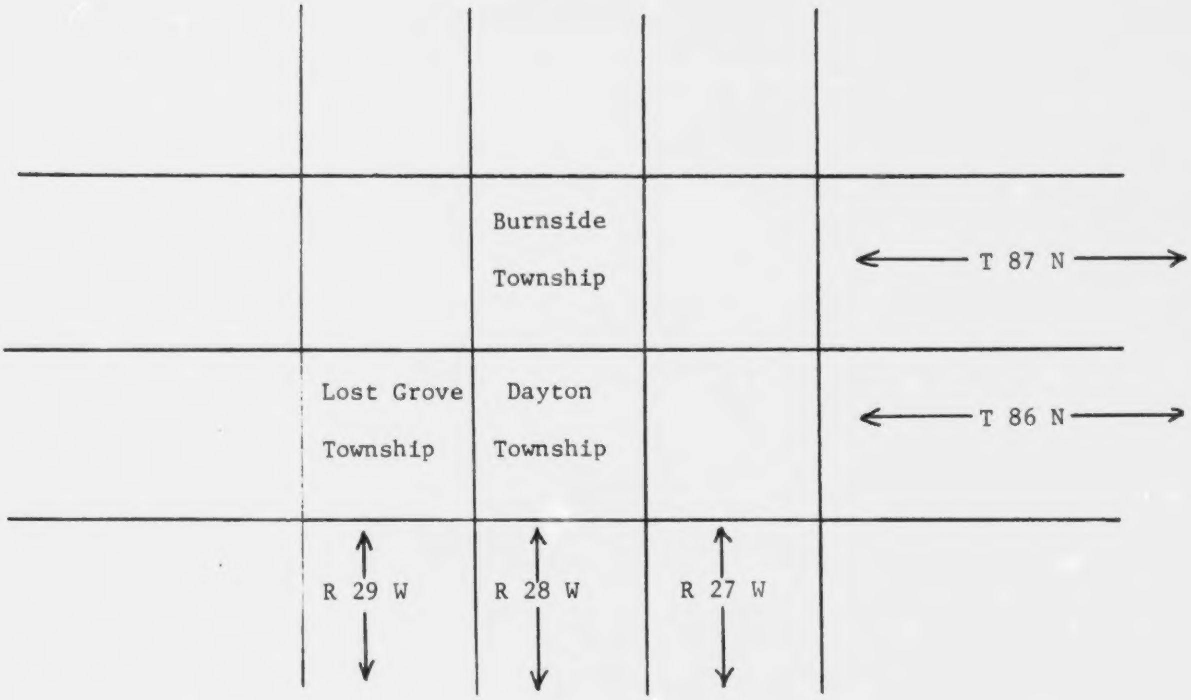
Iowa is divided into 99 counties, and each county has a name. Each county is divided into subunits called townships. Each township is divided into 36 sections of one square mile. Each section is divided into four units called quarter-sections. The quarter-sections may also be divided into four units called quarter-of-quarter sections. Study Figure 1 to become familiar with the systematic breakdown.

The legal description is a compilation of the names for each of the subdivisions, beginning with the smallest. One might think of the legal description as a pyramid where each level is a subdivision of the level below. To build up a legal description, start with the largest unit, the state, and fill in the name for each subsequent subdivision as shown in Figure 2. The legal description is obtained by reading the name of each level from the top down.

The state, the county, and the township are all designated by proper names; for example, the state of Iowa, the state of Kansas, Story County, Boone County, Richland Township, Grant Township. The townships, however, are also "named" by a coordinate system of range lines and township lines. One can think of the range and township lines as forming a grid which divides a county into pieces, each of which is 36 square miles. Each 36-square mile piece of land is a township and can be "named" by using the designation for the range line and the township line which intersect in that township. For example, in the state of Iowa, in Webster County, Lost Grove Township is also called "R29W T86N" (Figure 3). This means that Lost Grove Township is located in the area where Range Line 29 West (R29W) meets Township Line 86 North (T86N). In the same manner, Dayton Township (Figure 3) is called "R28W T86N" and Burnside Township is "R28W T87N."

Source: Suzanne Poland. Iowa State University, May 1981.

COORDINATED SYSTEM OF RANGE LINES AND TOWNSHIP LINES

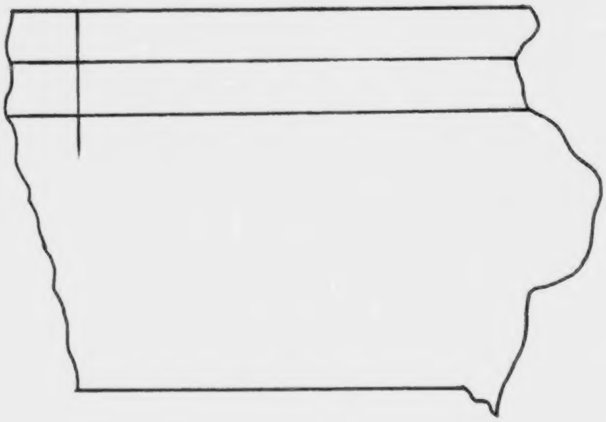

Burnside
Township
T 87 N
Lost Grove
Township
Dayton
Township
T 86 N
R 29 W
R 28 W
R 27 W

Lost Grove Township = R29W T86N

Dayton Township = R28W T86N

Burnside Township = R28W T87N

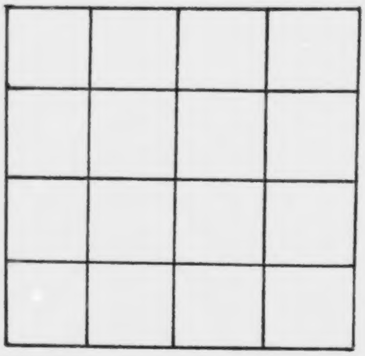
LEGAL LAND STRUCTURE



A STATE IS DIVIDED

INTO COUNTIES

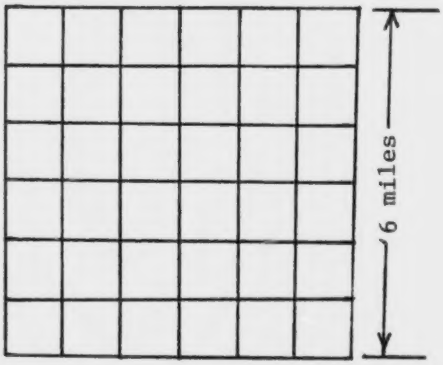
(number of counties varies)



A COUNTY IS DIVIDED

INTO TOWNSHIPS

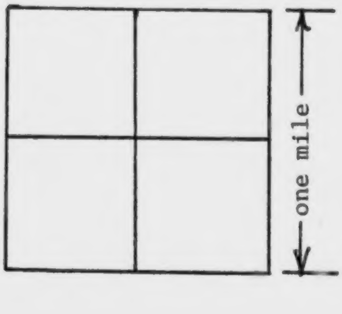
(number of townships varies)



A TOWNSHIP IS DIVIDED

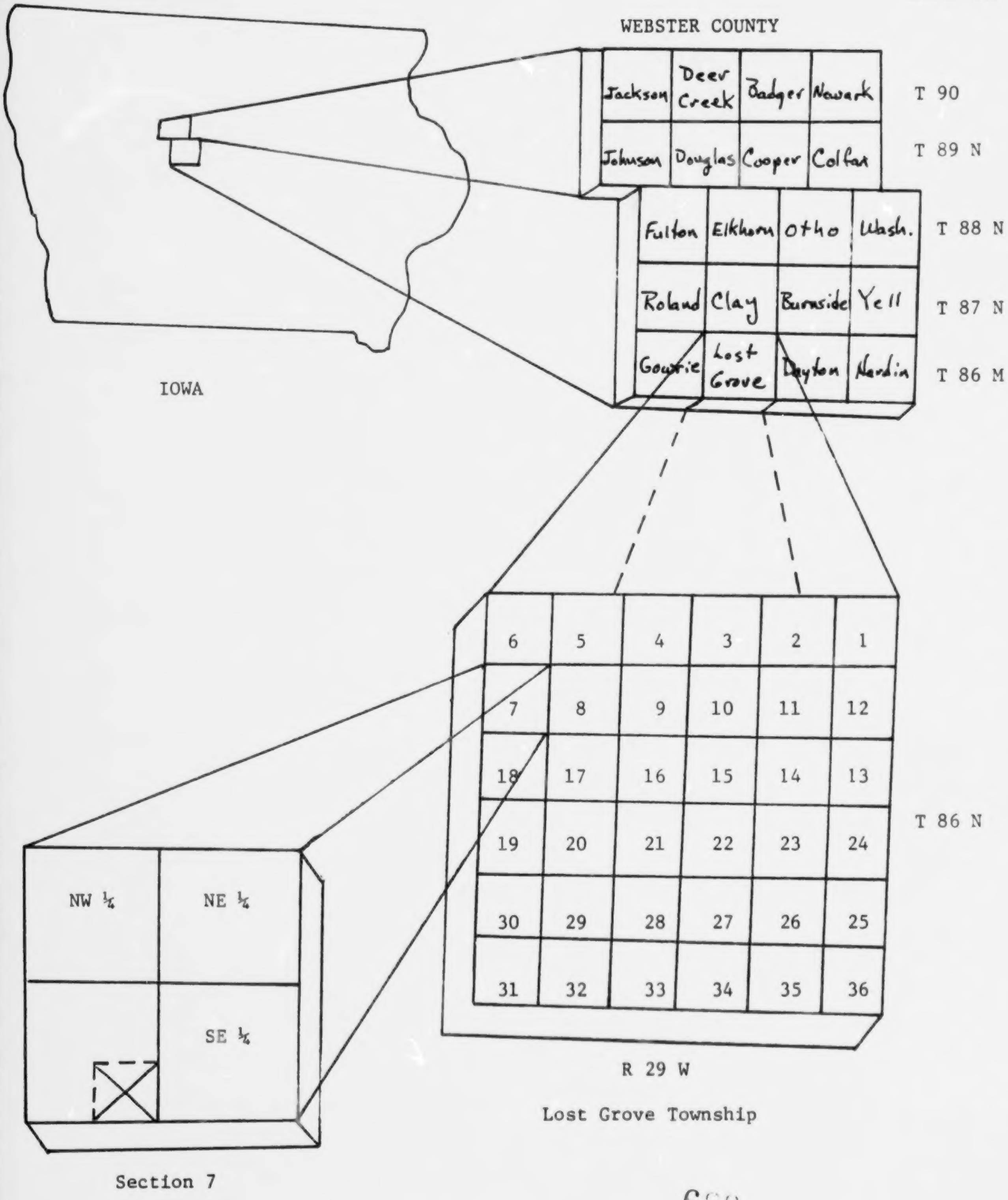
INTO 36 SECTIONS

(each section is one square mile)



A SECTION IS DIVIDED

INTO 4 QUARTER_SECTIONS


WEBSTER COUNTY
Jackson
Deer Creek
Badger
Newark
T 90
Johnson
Douglas
Cooper
Colfax
T 89 N
Fulton
Elkhorn
Otho
Wash.
T 88 N
Roland
Clay
Burnside
Yell
T 87 N
Gowrie
Lost Grove
Dayton
Nordin
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36
T 86 N
R 29 W
Lost Grove Township
NW ¼
NE ¼
SE ¼
Section 7

680

DEFINING PROPERTY LEGALLY

Using the information provided on INFO-1d, provide a legal description for property marked with an "X."

Legal Description: ______________________________________

LEGAL DESCRIPTIONS

NAME____________________________

Give the legal descriptions for the following:

1. Dale Lindeman, Section 2:

2. Audolph Suiter, Section 8:

3. Triple D Farms, Section 6:

4. E. Nolte, Section 32:

5. Beghtel, Section 31:

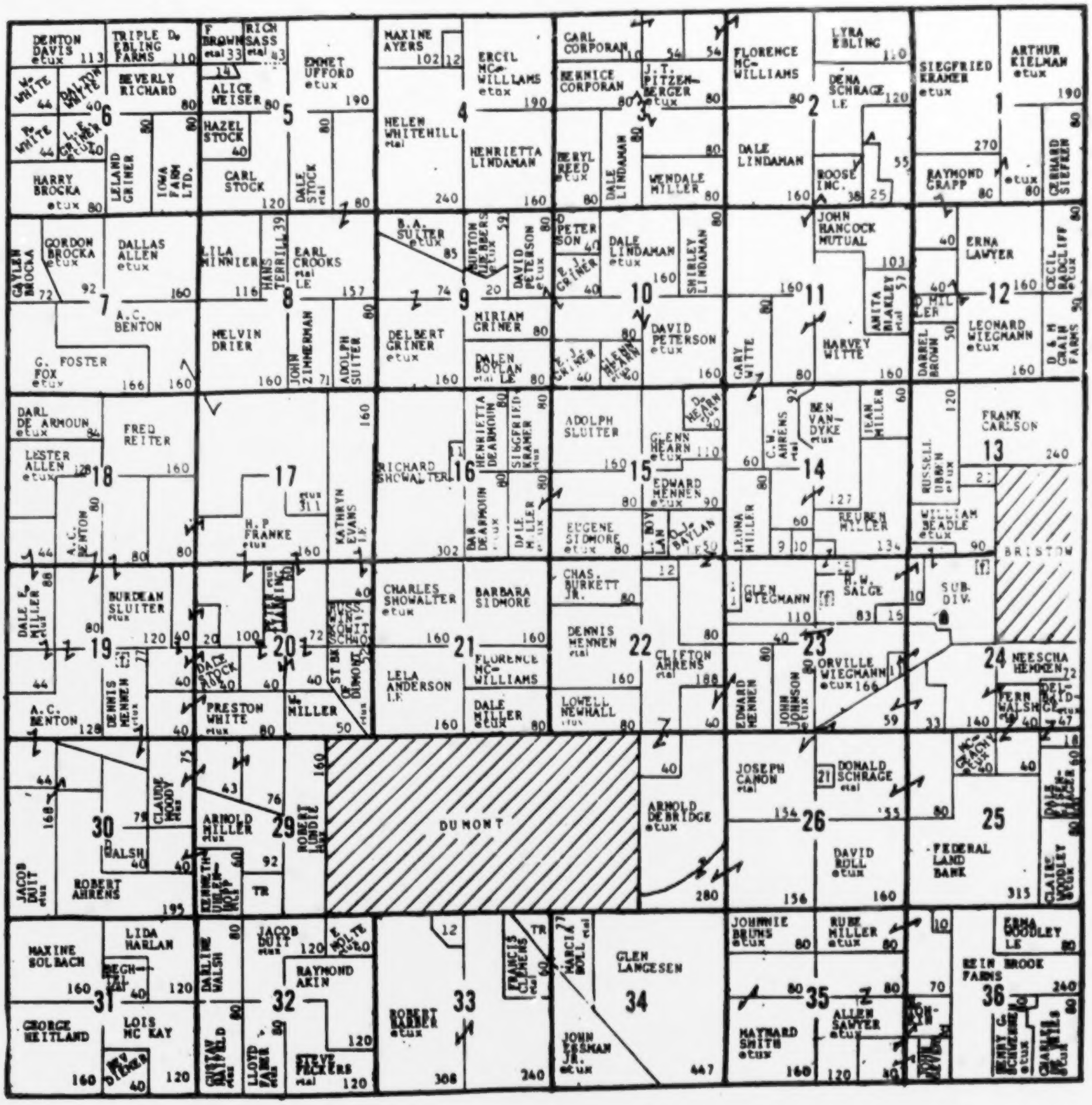
6. Jacob Duit, Section 32

7. Lois McKay, Section 31

8. Maynard Smith, Section 35

9. Dennis Mennen, Section 22

T-92-N PITTSFORD PLAT R-18-W


DENTON DAVIS etux
TRIPLE D. EBLING FARMS
F. BROWN
RICH SASS
EMMET UFFORD etux
MAXINE AYERS
ERCIL MC-WILLIAMS etux
CARL CORPORAN
J.T. PITZENBERGER
FLORENCE MC-WILLIAMS
LYRA EBLING
SIEGFRIED KRAMER etux
ARTHUR KIELMAN etux
BEVERLY RICHARD
ALICE WEISER
HELEN WHITEHILL
BERNICE CORPORAN
DENA SCHRAGE LE
HAZEL STOCK
CARL STOCK
DALE STOCK
HARRY BROCKA etux
LELAND GRINER
IOWA FARM LTD.
HENRIETTA LINDAMAN
BERYL REED etux
DALE LINDAMAN
WENDALE MILLER
ROOSE INC.
RAYMOND GRAPP
GERHARD SIEFKER
1
2
3
4
5
6
GAYLEN BROCKA
GORDON BROCKA etux
DALLAS ALLEN etux
A.C. BENTON
G. FOSTER FOX etux
LILA MINNIER
HANS TERRILL
EARL CROOKS LE
MELVIN DRIER
JOHN ZIMMERMAN
ADOLPH SUITER
B.A. SUITER etux
BURTON LIEBBERS
DAVID PETERSON
DELBERT GRINER etux
MIRIAM GRINER
DALEN BOYLAN LE
D. PETERSON
SHIRLEY LINDAMAN
GLENN HEARN
JOHN HANCOCK MUTUAL
ANITA BLAKLEY
GARY WITTE
HARVEY WITTE
ERNA LAWYER
CECIL RADCLIFF
LEONARD WIEGMANN etux
DARREL BROWN
D & M GRAIN FARMS
7
8
9
10
11
12
DARL DE ARMOUN etux
FRED REITER
LESTER ALLEN etux
H.P. FRANKE etux
KATHRYN EVANS LE
RICHARD SHOWALTER
HENRIETTA DEARMOUN
SIEGFRIED KRAMER
DAR DEARMOUN
DALE MILLER
ADOLPH SLUITER
GLENN HEARN etux
EDWARD HENNEN
EUGENE SIDMORE etux
C.W. AHRENS
BEN VAN-DYKE
JEAN MILLER
LEONA MILLER
REUBEN MILLER
FRANK CARLSON
RUSSELL OBRIEN
WILLIAM BEADLE etux
BRISTOW
13
14
15
16
17
18
DALE E. MILLER
BURDEAN SLUITER
DENNIS HENNEN
A.C. BENTON
PRESTON WHITE
DALE STOCK
MILLER
CHARLES SHOWALTER etux
BARBARA SIDMORE
LELA ANDERSON LE
FLORENCE MC-WILLIAMS
DALE MILLER etux
CHAS. BURKETT JR.
DENNIS HENNEN
CLIFTON AHRENS
LOWELL NEWHALL
GLEN STEGMANN
H.W. SALGE
EDWARD HENNEN
JOHN JOHNSON
ORVILLE WIEGMANN etux
SUB. DIV.
NEESCHA HEMMEN
FERN WALSH
19
20
21
22
23
24
CLAIRE MOODY
WALSH
JACOB DUIT etux
ROBERT AHRENS
ARNOLD MILLER etux
ROBERT LINDLE
TR
DUMONT
ARNOLD DEBRIDGE etux
JOSEPH CANON
DONALD SCHRAGE
DAVID ROLL etux
FEDERAL LAND BANK
CLAIRE WOODLEY etux
25
26
29
30
MAXINE SOLBACH
LIDA HARLAN
GEORGE HEITLAND
LOIS MC KAY
DARLENE WALSH
GUSTAV
LLOYD
JACOB DUIT
RAYMOND AKIN
STEVE PICKERS
ROBERT
FRANCIS CLEMENS
MARCIA ROLL
GLEN LANGESEN
JOHN YESMAN JR. etux
JOHNNIE BRUNS etux
RUBE MILLER etux
MAYNARD SMITH etux
ALLEN SAWYER etux
ERNA WOODLEY LE
REIN BROOK FARMS
31
32
33
34
35
36

TRUCK USAGE

OBJECTIVE:

You will learn to find information and make decisions from a data base file.

Situation:

On March 19, while deliverying feed to Bob Johnson, Rich dropped the clipboard that he uses to keep tract of deliveries in the hog pen and the hogs ate it. He wants you to help him find out what other deliveries are left to make today.

Problem:

Find the customers, what feeds need to be delivered, and what quantities need to be delivered.

Procedure:

Use the "Customers" file, the "MarSales" file, and the plat map to answer the questions.

1. Deliveries have already been made to Tim Tibbits and Bob Johnson. What deliveries are left to make? Circle all correct answers.

    A. Dave Winter, 2800 lbs. BeefStart
    B. Tim Morris, 3000 lbs. GrowMore
    C. Mike Hendricks, 3000 lbs. BeefGrow
    D. Jim Peterson, 2500 lbs. GrowMore
    E. Mike Cash, 9000 lbs. GrowRite40
    F. Henry Nelson, 2800 lbs. BeefSTart
    G. William Franklin, 14000 lbs. GrowRite40
    H. George Palmer, 9000 lbs. GrowRite40
    I. Zen Miller, 3000 lbs. MorMilk
    J. Tom Nesbit, 6000 lbs. BeefGrow

2. What deliveries can be combined to cut driving distance, and therefore saving money?

3. How many pounds of feed have been delivered so far this month (March 20)?

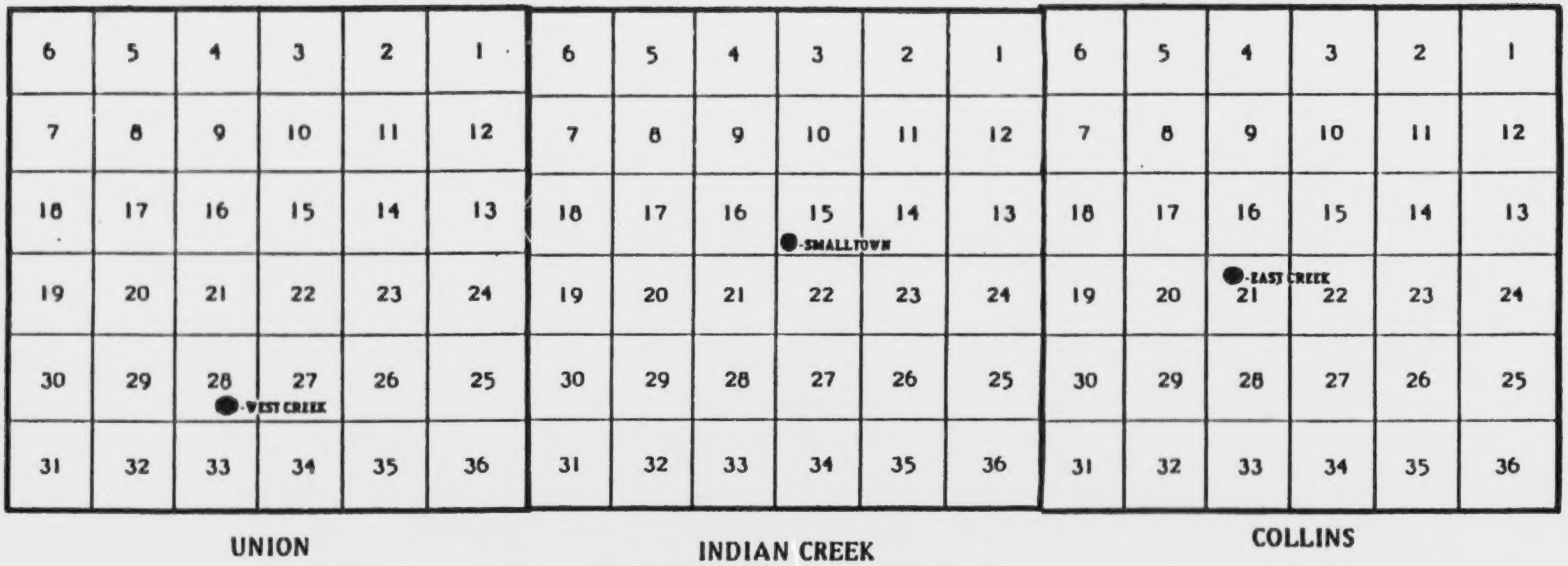
   A. 539,246   B. 581,360
   C. 592,696   D. 556,294

4. How many total pounds of feed have been sold so far this month?

   A. 592,696   B. 644,900
   C. 654,910   D. 658,696

5. What percent of the total feed sales have been made through the truck?

   A. 89%   B. 91%
   C. 77%   D. 86%


SMALLTOWN
EAST CREEK
WEST CREEK
UNION
INDIAN CREEK
COLLINS

FACTORS WHEN MAKING A DELIVERY SCHEDULE

1. TIME ORDER IS TO BE DELIVERED
2. LOCATION OF THE CUSTOMER
3. SIZE OF THE FEED ORDER
4. TYPE OF FEED AND MEDICATION USED

PROBLEM AREA 3

WHAT ROLE DOES A BOARD OF DIRECTORS PLAY IN A LIVESTOCK SALES AND SERVICE BUSINESS?

Contents

Page

Teaching Outline..1

INFO-1 Characteristics of a Cooperative.......................5

TM-3 Purpose of a Board of Directors........................6

TM-3 Example of a Feed Manufacturing Plant Cooperative......7

INFO-4 Lines of Authority....................................8

INFO-5 Using Data Base.......................................10

ACT-6 Spreadsheet Problem...................................11

PROBLEM 3: What role does a board of directors play in a livestock sales and service business?

INTEREST APPROACH:

Develop an agenda typical of that for a board meeting. The topic of the agenda is to determine the profitability of the business. Stage a mock board meeting by drawing board positions out of a hat and assigning them to members of the class. Assign the rest of the class to be members of the organization. What information will the board members and membership need to determine the profitability of the business and what records will provide this information.

STUDY QUESTIONS:

1. What is a board of directors?
2. What people make up the board of directors?
3. What areas of business would the board expect to analyze to determine the success of the business?
4. What type records would a supervisor present to the manager, to the board, and to its members?
5. How can one obtain these records in the easiest manner?

LEARNER NEEDS:

Many student learning needs can be enhanced through introduction on this problem. The following learning activities should be emphasized through the student learning activities:

Communication skills are enhanced through role play. Student Learning Activity #1.

Create better relations with classmates through role playing. Student Learning Activity #1.

Creating self-confidence. Student Learning Activity #3.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the student learning activities:

Improve students' communication skills. Student Learning Activity #3.

Problem solving on information to be presented. Student Learning Activity #3.

Improve students' writing and spelling skills. Student Learning Activity #1.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the student learning activities:

Critical thinking improved on formulation of equations. Student Learning Activity #2.

Improve decision making on how to analyze data. Student Learning Activity #3.

Distinguish between relevant and irrevelant information. Student Learning Activity #3.

LEARNING ACTIVITIES:

1. Give students a copy of INFO-1--Characteristics of a Cooperative. Discuss the handout and point out the role of the board of directors in the cooperative (TM-2). Secure a recent local cooperative board meeting agenda and discuss the type of items that appear on the agenda. Review and discuss the structure and lines of authority of a cooperative in TM-3 and

INFO-4. Arrange with a local cooperative for the class to set in on a local board meeting. Have students summarize their observations of the meeting in a written paper.

2. Using ACT-5, have students take a data base of information, transfer it into a spreadsheet and obtain records that should be presented to the board.

3. Using ACT-6, have students give total tons of products and dollar value to the company.

CONCLUSION:

Role of a board of directors:

The board is responsible for hiring management, setting policy, and insuring that the cooperative is operated in a manner consistent with the wishes of the majority of the members.

Composition of the board of directors:

Members of the board consist of "Class A" producer members of the cooperative that are elected at a general meeting by "Class A" shareholders of the company. The terms are established in accordance with Chapter 499 of the Code of Iowa. The terms are usually on a rotational basis to replace members every other year.

Areas of the business would be board expect to analayze to determine the success of the business.

The board would analayze all financial aspects of all areas. Also covered would be major expenses that may be incurred in the next month. No meetings can be closed door sessions. However, the board may adjoun into an exective session if deemed necessary.

Types of records that a supevisor should present to the manager, the board, and its members.

The supervisor would show records of feed sales from advertisements and promotions held for the month.

The supervisor is responsible to the manager for employee performance. The manager is responsible to the board.

Most of these records can be obtained from a monthly company statement usually obtained from the company computer, ledger sheet, or accountant.

EVALUATION:

Upon completion of this lesson, students will be able to:

List the people that make up a board meeting.

Develop a list of items needed to be presented to the board.

To present the information in an orderly manner.

Take information from a data base, transfer it into a spreadsheet, and analyze important data to determine the profitability of the business.

OPTIONAL LEARNING ACTIVITIES:

1. Members of a local elevator board could be invited in to discuss their duties and responsibilities. They can also discuss their methods of elections and how they came to become board members.
2. Management could be invited to present the duties and responsibilities of the general manager relative to the board of directors and his emloyees.

REFERENCES:

Farm and Ranch Business Management, an instructional material. Deere and Company, Service and Training Department. John Deere Road, Moline, Illinois 61265.

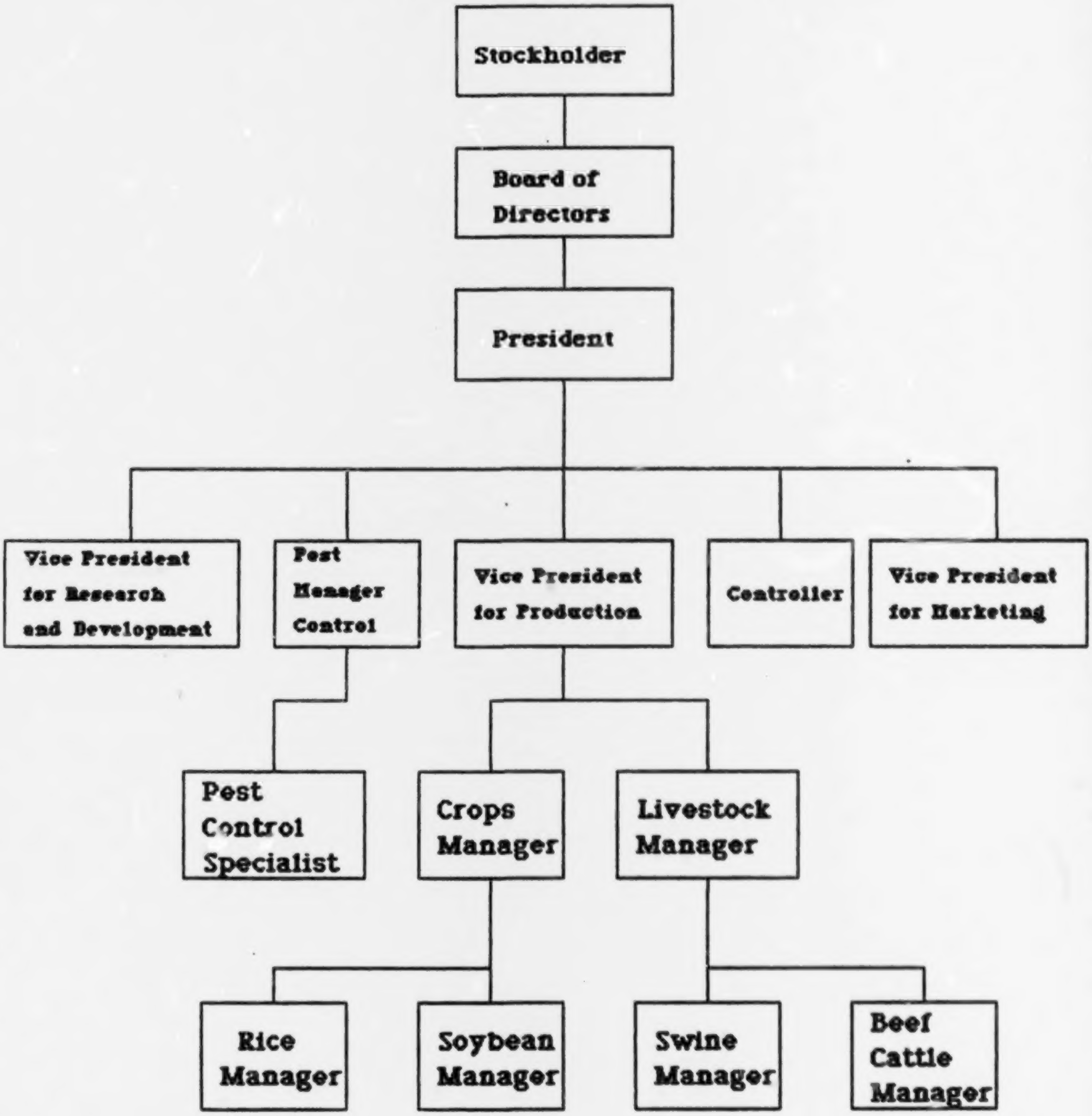
CHARACTERISTICS OF A COOPERATIVE

1. Cooperative businesses are owned by members who use them. Members do business directly with the cooperatives.
2. Cooperatives emphasize member control. Each member has some voice in the business affairs. Each member helps select the board of directors.
3. Cooperatives are operated on a non-profit basis. When profits areaccidenntly made, they are returned to the members as patronage dividends.
4. Cooperatives are organized in response to the mutual interest and needs of the members. Membership is voluntary. Members are free to patronize the cooperative or do their business elsewhere.
5. Members of a cooperative share risk, returns above cost of operation (patronage dividends), and financial support in proportion to the amount of business that they do with the cooperative.
6. Members of the cooperative elect the board of directors. This board is responsible for hiring management, setting policy, and insuring that the cooperative is operated in a manner consistent with the wishes of the majority of the members.

PURPOSE OF A BOARD OF DIRECTORS

The board of directors is responsible for hiring management, setting policy, and insuring that the cooperative is operated in a manner consistent with the wishes of the majority of the members.

Example of a Feed Manufacturing Plant Cooperative


Stockholder
Board of Directors
President
Vice President for Research and Development
Pest Manager Control
Vice President for Production
Controller
Vice President for Marketing
Pest Control Specialist
Crops Manager
Livestock Manager
Rice Manager
Soybean Manager
Swine Manager
Beef Cattle Manager

Credits:

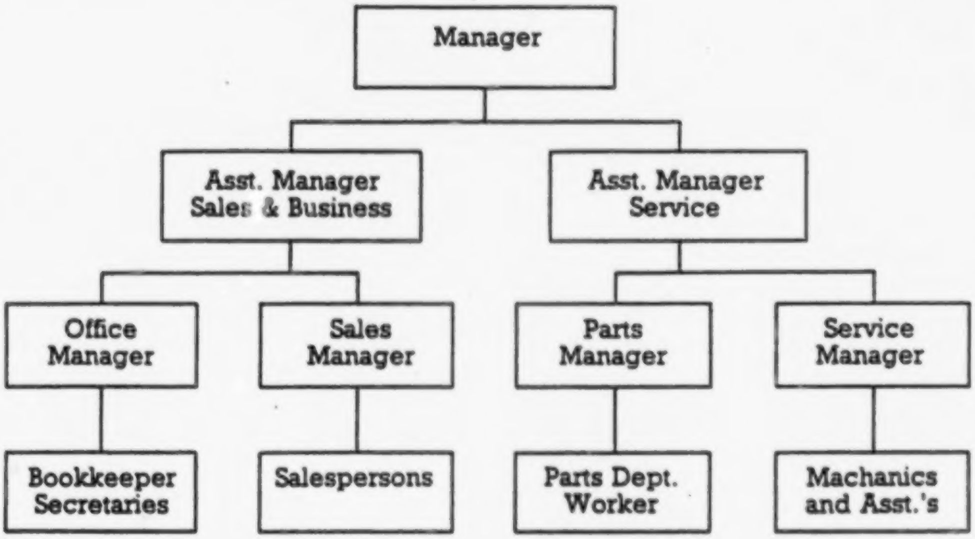
1. **Opportunities in Agricultural Occupations Willard H. Wolf, Ohio State University, 1976**

LINES OF AUTHORITY

Organizational structure provides ways to communicate between management and workers. The structure also defines who is in positions of authority and this helps keep an agribusiness operating efficiently. The following are examples of organizational stuctures.

1. Line Organization: each worker is responsible to only one supervisor.

   Example: Farm Machinery Dealer

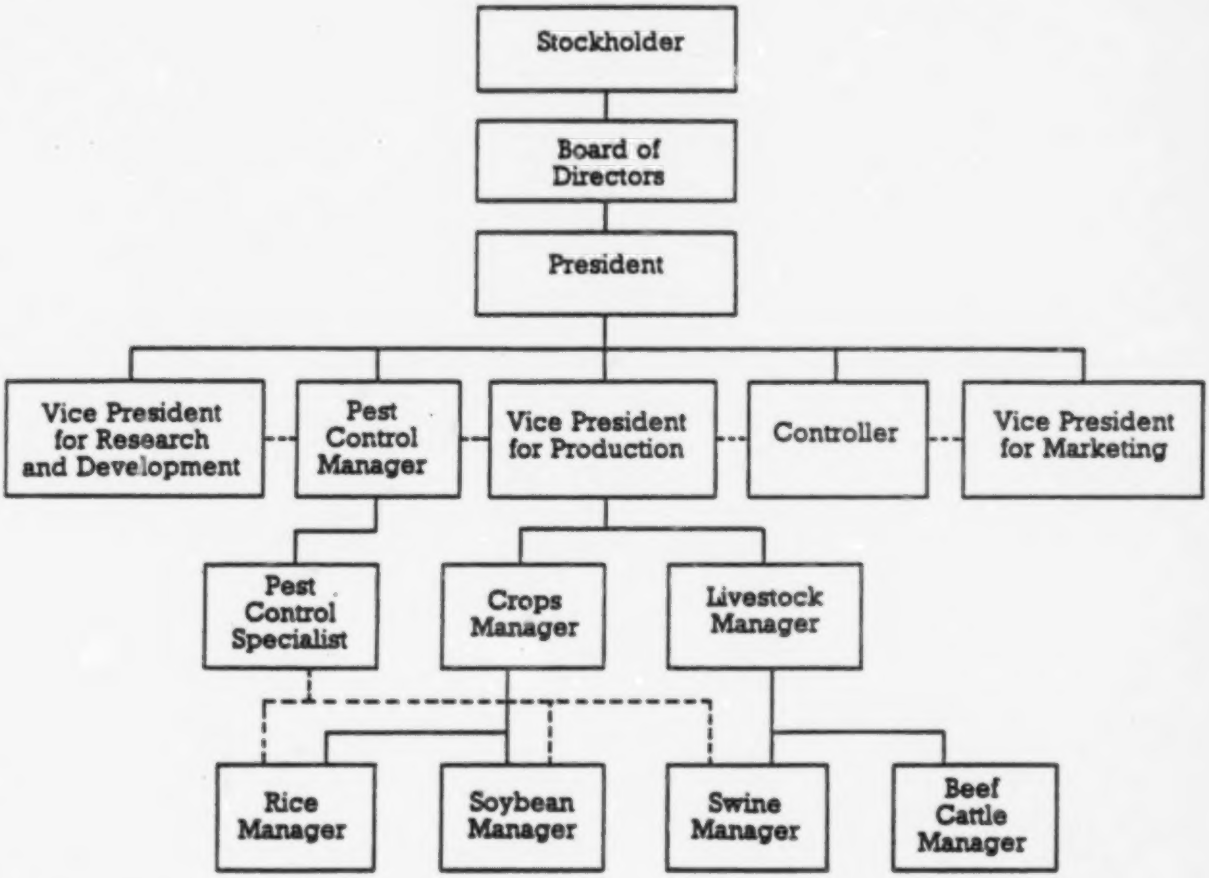

Manager
Asst. Manager Sales & Business
Asst. Manager Service
Office Manager
Sales Manager
Parts Manager
Service Manager
Bookkeeper Secretaries
Salespersons
Parts Dept. Worker
Machanics and Asst.'s

2. Functional Organization: each worker may have more than one supervisor. Supervisors specialize in an area.

   For example: You may have a supervisor in charge of inspection and one in charge of assembly. One assembly worker would have both supervisors.

3. Line-and-Staff Organization: each worker has one main supervisor with special supervisors for specialized areas.

Example of a Feed Manufacturing Plant Cooperative


Stockholder
Board of Directors
President
Vice President for Research and Development
Pest Control Manager
Vice President for Production
Controller
Vice President for Marketing
Pest Control Specialist
Crops Manager
Livestock Manager
Rice Manager
Soybean Manager
Swine Manager
Beef Cattle Manager

Credits:

1. Opportunities in Agricultural Occupations. Willard H. Wolf, Ohio State University, 1976.

USING DATA BASE

Object: In this activity you will be able to take information from a data base, transfer it into a spreadsheet, and analyze information about an elevator business.

Procedure: To change data base information into spreadsheet:

1. Boot up Appleworks and place the data disk into drive 2
2. Select add a file from disk 2
3. Select the file "elev" (data base)
4. Press Open Apple P
5. Choose a report format
6. Select feed
7. Press Open Apple P
8. Chose to a Dif file
9. Enter pathname of "/elev"
10. Escape to main menu, select add a file to desktop
11. Select spreadsheet from Dif file
12. Type /JAA/Elev
13. Name file Elevator
14. The information now appears in an Appleworks spreadsheet
15. Press Apple I for insert
16. Select Row and answer 2 rows

17. Type the following headings across the corresponding cells

18. You would like to know the total amount of QStart sold

Procedure:

1. Arrow down to cell A37 and type "Total="

2. Arrow to the next cell, B37. Type @ sum C and value will show at the bottom of the screen

3. Arrow up to cell B3 and press the period

4. Arrow down to cell B35 and press return. Press shift parenthesis

5. Hit return and notice the amount. The bottom of the screen should show value: @Sum (B3...B35) and (cell B37 show 174070). This is the total amount of QStart sold.

   Continue through the spreadsheet and calculate the total for each item.

SPREADSHEET PROBLEM

Name ______________________

This assignment is an exercise in determining the amount of product an individual would use in one months period of time. Many times one would like to see what products are used the most or least to evaluate their feed program. Using the spreadsheet file "COOP.SALES" have students calculate the following information.

1. How much of the following products were sold? (Use the @sum command to add the columns)

QSTART	GMOR	GRITE	GPAK	SOWVIT
----------	------	-------	---------	-------

2. What percent of the total was each of the following?

QSTART	GMOR	GRITE	GPAK	SOWVIT
----------	------	-------	---------	-------

3. Which customer bought the most of each of the following?

QSTART	GMOR	GRITE	GPAK	SOWVIT
----------	------	-------	---------	-------

```
                          KEY
                    FROM FEED.SALES
              USE OPEN APLLE Z FOR FORMULAS

                                Page 1

        QSTART   GMOR     GRITE    GPAK   SOWVIT  TOTAL FEED FED
174070  1567630  4968297   173070  62660    6945727

TOTAL FEED    =  6945727

PERCENT TOTAL =    2.51%  22.57%  71.53%    2.49%     .90%
```

File: FEED.SOLD

NAME	QSTART	GMOR	GRITE	GPAK	SOWVIT	TOTAL FEED FED	% FED
Dave Winter	25000	225000	680000	25000	7850	962850	13.86%
Dean Carstens	15000	135000	408200	15000	4750	577950	8.32%
Bob Johnson	10000	90000	272000	10000	3150	385150	5.55%
George Eastman	10000	90000	272000	10000	3150	385150	5.55%
Tim Tibbits	10000	90000	281100	10000	3700	394800	5.68%
Tim Morris	7000	64000	0	0	0	71000	1.02%
Tom Nesbit	7000	63000	191900	7000	2200	271100	3.90%
Brenda Moody	7000	63000	196600	7000	2700	276300	3.98%
Sylvia Foggle	7000	63000	196600	7000	2700	276300	3.98%
Jim Levad	7000	63000	196600	7000	2700	276300	3.98%
Mike Cash	6000	54000	163520	6000	1900	231420	3.33%
Ed Dodds	5000	45000	136100	5000	1600	192700	2.77%
Robert Bradley	4500	40500	127000	4500	1800	178300	2.57%
Curtiss Mitchel	4500	40500	127029	4500	1780	178309	2.57%
George Palmer	4000	36000	109200	4000	1300	154500	2.22%
Jim Peterson	4000	36000	110000	4000	1300	155300	2.24%
Bryan Meyers	4000	36000	110000	4000	1300	155300	2.24%
Charles Johnson	3500	31500	94856	3500	1080	134436	1.94%
Jimmy Smith	3500	31500	94900	3500	1100	134500	1.94%
Ross Pope	3500	31500	98441	3500	1360	138301	1.99%
Eddie Patterson	3500	31500	94900	3500	1100	134500	1.94%
Don Jansen	3000	27000	82000	3000	950	115950	1.67%
Marion Wilson	3000	27000	84619	3000	1180	118799	1.71%
John Taylor	2785	25065	79674	2785	1780	112089	1.61%
Kelvin Goldman	2785	25065	79674	2785	1130	111439	1.61%
Stanley Overshe	2500	22500	68250	2500	800	96550	1.39%
Willie Hall	2500	22500	70447	2500	980	98927	1.42%
Bob Henderson	2000	18000	54650	2000	800	77450	1.12%
Fredrick Beaver	2000	18000	56582	2000	800	79382	1.14%
Victor Hall	1500	13500	42760	1500	620	59880	.86%
Mike Hendricks	1000	9000	28600	1000	450	40050	.58%
William Frankli	0	0	163520	6000	1900	171420	2.47%
Tyrone Morris	0	0	196575	0	2700	199275	2.87%
	------	------	------	------	------	-------	
TOTAL AMT.	174070	1567630	4968297	173070	62660	6945727	

TOTAL FEED = 6945727

PERCENT TOTAL = 2.51% 22.57% 71.53% 2.49% .90%

712

File: COOP.SALES

NAME	QSTART	GMOR	GRITE	GPAK	SOWVIT	TOTAL FEED FED	% FED
Dave Winter	25000	225000	680000	25000	7850		
Dean Carstens	15000	135000	408200	15000	4750		
Bob Johnson	10000	90000	272000	10000	3150		
George Eastman	10000	90000	272000	10000	3150		
Tim Tibbits	10000	90000	281100	10000	3700		
Tim Morris	7000	64000	0	0	0		
Tom Nesbit	7000	63000	191900	7000	2200		
Brenda Moody	7000	63000	196600	7000	2700		
Sylvia Foggle	7000	63000	196600	7000	2700		
Jim Levad	7000	63000	196600	7000	2700		
Mike Cash	6000	54000	163520	6000	1900		
Ed Dodds	5000	45000	136100	5000	1600		
Robert Bradley	4500	40500	127000	4500	1800		
Curtiss Mitchel	4500	40500	127029	4500	1780		
George Palmer	4000	36000	109200	4000	1300		
Jim Peterson	4000	36000	110000	4000	1300		
Bryan Meyers	4000	36000	110000	4000	1300		
Charles Johnson	3500	31500	94856	3500	1080		
Jimmy Smith	3500	31500	94900	3500	1100		
Ross Pope	3500	31500	98441	3500	1360		
Eddie Patterson	3500	31500	94900	3500	1100		
Don Jensen	3000	27000	82000	3000	950		
Marion Wilson	3000	27000	84619	3000	1180		
John Taylor	2785	25065	79674	2785	1780		
Keivin Goldman	2785	25065	79674	2785	1180		
Stanley Overshe	2500	22500	68250	2500	800		
Willie Hall	2500	22500	70447	2500	980		
Bob Henderson	2000	18000	54650	2000	800		
Fredrick Beaver	2000	18000	56582	2000	800		
Victor Hall	1500	13500	42760	1500	620		
Mike Hendricks	1000	9000	28600	1000	450		
William Frankli	0	0	163520	6000	1900		
Tyrone Morris	0	0	196575	0	2700		
TOTAL AMT.							

PERCENT TOTAL =

```
File:   FEED.SOLD

    NAME          QSTART     GMOR    GRITE     GPAK   SOWVIT  TOTAL FEED FED    % FED

Dave Winter        25000   225000   680000    25000     7850          962850   13.86%
Dean Carstens      15000   135000   408200    15000     4750          577950    8.32%
Bob Johnson        10000    90000   272000    10000     3150          385150    5.55%
George Eastman     10000    90000   272000    10000     3150          385150    5.55%
Tim Tibbits        10000    90000   281100    10000     3700          394800    5.68%
Tim Morris          7000    64000        0        0        0           71000    1.02%
Tom Nesbit          7000    63000   191900     7000     2200          271100    3.90%
Brenda Moody        7000    63000   196600     7000     2700          276300    3.98%
Sylvia Foggle       7000    63000   196600     7000     2700          276300    3.98%
Jim Levad           7000    63000   196600     7000     2700          276300    3.98%
Mike Cash           6000    54000   163520     6000     1900          231420    3.33%
Ed Dodds            5000    45000   136100     5000     1600          192700    2.77%
Robert Bradley      4500    40500   127000     4500     1800          178300    2.57%
Curtiss Mitchel     4500    40500   127029     4500     1780          178309    2.57%
George Palmer       4000    36000   109200     4000     1300          154500    2.22%
Jim Peterson        4000    36000   110000     4000     1300          155300    2.24%
Bryan Meyers        4000    36000   110000     4000     1300          155300    2.24%
Charles Johnson     3500    31500    94856     3500     1080          134436    1.94%
Jimmy Smith         3500    31500    94900     3500     1100          134500    1.94%
Ross Pope           3500    31500    98441     3500     1360          138301    1.99%
Eddie Patterson     3500    31500    94900     3500     1100          134500    1.94%
Don Jensen          3000    27000    82000     3000      950          115950    1.67%
Marion Wilson       3000    27000    84619     3000     1180          118799    1.71%
John Taylor         2785    25065    79674     2785     1780          112089    1.61%
Kelvin Goldman      2785    25065    79674     2785     1180          111489    1.61%
Stanley Oversne     2500    22500    68250     2500      800           96550    1.39%
Willie Hall         2500    22500    70447     2500      980           98927    1.42%
Bob Henderson       2000    18000    54650     2000      800           77450    1.12%
Fredrick Beaver     2000    18000    56582     2000      800           79382    1.14%
Victor Hall         1500    13500    42760     1500      620           59880     .86%
Mike Hendricks      1000     9000    28600     1000      450           40050     .58%
William Frankli        0        0   163520     6000     1900          171420    2.47%
Tyrone Morris          0        0   196575        0     2700          199275    2.87%
                  ------   ------   ------   ------   ------         -------

   TOTAL AMT.     174070  1567630  4968297   173070    62660         6945727

TOTAL FEED   =   6945727

PERCENT TOTAL =    2.51%   22.57%   71.53%    2.49%     .90%
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```
File:   FEED.FORMULAS

NAME QSTART      GMOR        GRITE        GPAK         SOWVIT        TOTAL FEED FED      % FED
==========================================================================================================
Dave 25000       225000      680000       25000        7850          @SUM(B3...F3)       +H3/H37
Dean 15000       135000      408200       15000        4750          @SUM(B4...F4)       +H4/H37
Bob J10000       90000       272000       10000        3150          @SUM(B5...F5)       +H5/H37
Georg10000       90000       272000       10000        3150          @SUM(B6...F6)       +H6/H37
Tim T10000       90000       281100       10000        3700          @SUM(B7...F7)       +H7/H37
Tim M7000        64000       0            0            0             @SUM(B8...F8)       +H8/H37
Tom N7000        63000       191900       7000         2200          @SUM(B9...F9)       +H9/H37
Brend7000        63000       196600       7000         2700          @SUM(B10...F10)     +H10/H37
Sylvi7000        63000       196600       7000         2700          @SUM(B11...F11)     +H11/H37
Jim L7000        63000       196600       7000         2700          @SUM(B12...F12)     +H12/H37
Mike 6000        54000       163520       6000         1900          @SUM(B13...F13)     +H13/H37
Ed Do5000        45000       136100       5000         1600          @SUM(B14...F14)     +H14/H37
Rober4500        40500       127000       4500         1800          @SUM(B15...F15)     +H15/H37
Curti4500        40500       127029       4500         1780          @SUM(B16...F16)     +H16/H37
Georg4000        36000       109200       4000         1300          @SUM(B17...F17)     +H17/H37
Jim P4000        36000       110000       4000         1300          @SUM(B18...F18)     +H18/H37
Bryan4000        36000       110000       4000         1300          @SUM(B19...F19)     +H19/H37
Charl3500        31500       94856        3500         1080          @SUM(B20...F20)     +H20/H37
Jimmy3500        31500       94900        3500         1100          @SUM(B21...F21)     +H21/H37
Ross 3500        31500       98441        3500         1360          @SUM(B22...F22)     +H22/H37
Eddie3500        31500       94900        3500         1100          @SUM(B23...F23)     +H23/H37
Don J3000        27000       82000        3000         950           @SUM(B24...F24)     +H24/H37
Mario3000        27000       84619        3000         1180          @SUM(B25...F25)     +H25/H37
John 2785        25065       79674        2785         1780          @SUM(B26...F26)     +H26/H37
Keivi2785        25065       79674        2785         1180          @SUM(B27...F27)     +H27/H37
Stanl2500        22500       68250        2500         800           @SUM(B28...F28)     +H28/H37
Willi2500        22500       70447        2500         980           @SUM(B29...F29)     +H29/H37
Bob H2000        18000       54650        2000         800           @SUM(B30...F30)     +H30/H37
Fredr2000        18000       56582        2000         800           @SUM(B31...F31)     +H31/H37
Victo1500        13500       42760        1500         620           @SUM(B32...F32)     +H32/H37
Mike 1000        9000        28600        1000         450           @SUM(B33...F33)     +H33/H37
Willi0           0           163520       6000         1900          @SUM(B34...F34)     +H34/H37
Tyron0           0           196575       0            2700          @SUM(B35...F35)     +H35/H37
  ------------   ---------   ----------   ---------    --------      ---------------     ----------
    T@SUM(B3...B35) @SUM(C3...C35) @SUM(D3...D35) @SUM(E3...E35) @SUM(F3...F35)  @SUM(H3...H35)  @SUM(I3...I35)

TOTAL@SUM(B37...F37)

% =  +B37/B39     +C37/B39      +D37/B39     +E37/B39      +F37/B39
```

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PROBLEM AREA 4

WHAT SKILLS ARE NEEDED BY A SUPERVISOR TO BE EFFECTIVE IN HIS JOB?

Contents

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TM-2 Employee Records Should Include:....................8

ACT-3 Employee Data Base I...............................9

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INFO-6 Analyzing Performance Gaps.........................13

PROBLEM 4: What skills are needed by a supervisor to be effective in his job?

INTEREST APPROACH:

The supervisor of employees in the Beaver Creek Country Store is confronted with a problem that he must solve. Two of the employees he is supervising are fighting and it is affecting the store operation and employee moral. The two employees are both highly skilled employees that the business needs to carry out its business functions. The fight between the two employees stems back to jealousy between the two over the ability to perform business activities. When one employee completes a job and receives credit, it makes the other employee mad. Each employee does everything possible to discredit the work of another. You, as their supervisor, must settle the dispute between them in order to get the business back on track. How should the supervisor settle this situation?

STUDY QUESTIONS:

1. What records should a supervisor keep on employees?
2. What type of evaluation procedures should be used to justify employee promotions or dismissals?
3. What can a supervisor do to ensure that the employees are always current on new technology in their field?
4. How can a supervisor keep abreast of the needs of company and employees concerns?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Creating self-confidence. Student Learning Activity #3.

To make intelligent decisions. Student Learning Activity #1 and 4.

For human relations and communicative skills. Student Learning Activity #4.

For mature intellectual functioning. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Problem solving on information to be presented. Student Learning Activity #3.

Improve the students' ability to correctly spell words commonly used in writing. Student Learning Activity #4.

Improve the students' ability to operate a computer and enter information. Student Learning Activity #2.

Improve the students' ability to express his/her opinion in a clear and concise manner. Student Learning Activity #4.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguishing between warranted and unwarranted claims. Student Learning Activity #4.

Interpretation and evaluation of facts. Student Learning Activity #2.

Improve decision making on how to analyze records and people job performance objectively. Student Learning Activity #2.

Distinguish between relevant and irrevelant information. Student Learning Activity #4.

LEARNING ACTIVITIES:

1. Have students develop a criteria list for each job required at an elevator and what would be considered a satisfactory performance of each job. Hand out ACT-1 and have students develop a worksheet which would obtain information that is important on each individual. Summarize using TM-2 on information that should be kept on each employee. Have students present their information to the group. After collecting all the information, have them develop a data base that would contain that information. Using ACT-3, have students change the information in the file (employees).

2. Have students list reasons why individuals are promoted and dismissed. Hand out ACT-4 for students to complete. This will give them experience at determining personnel that would receive promotions.

3. Have students use ACT-5 and read magazines in the classroom to evaluate new innovations and technology that would affect a position in the livestock supply industry. Have the students share their information with the class.

4. Hand out "Analyzing Performance Gaps" (INFO-6) to the students to read. Discuss actions they would perform in keeping up-to-date with employee concerns. Invite a local feed store manager to the class to show how he/she keeps abreast of needs of the business and the business employees. Compare the manager's comments with INFO-6.

CONCLUSION:

Records should be kept on each individual in the following areas:

Personal data: Name, age, birth date, social security number, closest relatives, phone number. (These are important items needed for tax forms, medical insurance forms, and information in case of an accident while working at the company.)

Job performances: A list of accomplishments that an individual can perform, promotion dates, dates of reprimands if any, dates absent, dates tardy, and employees working relationship to other employees. (These records are important when determining job promotions or job termination.)

Job income and expenses: Wages received, hours worked per week, expenses incurred while working. (These records are important when determining wages for payrolls and taxes.)

Miscellaneous: Vacation dates, sick leave days, meetings attended to keep abreast of new innovations of the industry. (These records help the supervisor schedule employees days off and help evaluate how a employee is keeping abreast of current topics in their job area.)

Many companies have set procedures in that determine promotions and dismissals. Some of the following are examples of those areas:

Promotions - Time that a person has worked for the company, many times an individual is on probation until a supervisor is sure of the individuals job performance. After that period of time, pay increases and also some job benefits are added such as health insurance and vacation time.

Dismissals - This area is much more difficult to give exact definition since many companies operate differently. Some companies have strict rules on tardiness and job absenteeism that can cause dismissals. Also personal relations with other employees is an important consideration. This area is best determined by each individual companies policies.

It is important for the supervisor to keep his employees current on many new laws and technologies in the livestock and feed industries. These are areas such as new drug laws, new feed and health products that the company has developed. The supervisor must schedule classes for the individuals to attend and make new requlations available to the employees. Many of these classes are sponsored by the company in order to keep the employees current.

The supervisor in most cases is the mediator between management and employees. The supervisor must keep in constant contact between the manager and board of directors to determine management goals and company improvement. The supervisor must also communicate with the employees to determine their needs and ways to increase job performance and company morale. After evaluating both sides a decision has to be made on how best to employ the plan of action.

EVALUATION:

Upon completion of this lesson, students will be able to:

List the important records that should be kept on an employee.

List of criteria that would determine if an idividual is promoted or dismissed.

Present a plan of action to keep employees current of new developments in their job area.

Take information and form data base in order to find information quickly and accurately.

OPTIONAL LEARNING ACTIVITIES:

1. Invite a local elevator supervisor to class and discuss their job responsibilities and how they handle their employees.
2. Visit a local elevator and observe the various jobs that are available in the feed and livestock industry.

REFERENCES AND INSTRUCTIONAL MATERIALS:

Agribusiness Procedures and Records. Lee/Lee, Chapter 1.

Agricultural Business Sales and Marketing, a Curriculum Material; Instructional Materials Laboratory, University of Missouri-Columbia, Columbia, Missouri, June 1984. (Catalog Number AG-51-1)

Human Relations in Agribusiness. Hillison/Crunkilton. Chapters 7 and 9

Selling in Agribusiness. Miller. Chapter 7.

Farm and Ranch Business Management: an Instructional Material, Deere & Company, Service and Training Department, John Deere Road, Moline, Illinois.

SUPERVISOR EMPLOYEE INFORMATION

SITUATION: As a supervisor of New Ag Feed Store you need to set up a record keeping system of your employees. Before you can begin, you must list all the important areas that should be considered.

ASSIGNMENT: List all the information that is important for supervisors to know about their employees.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

EMPLOYEE RECORDS SHOULD INCLUDE:

Personal data

Job performance information

Job income and expense data

Miscellaneous information

EMPLOYEE DATA BASE I

Information changes on employees often. Using the file "Employees," change the following data:

Name
Address
City
State
Zip
Phone
Emergency
Emergency Phone
Social Security Number
Date Hired
Wage
Last Raise
Education
Position
Experience
Training
Life Insurance.
Health Insurance
Retirement
Vacation Days
Sick Days
Comments

STEPS:

1. Boot up Appleworks
2. Select "Employee" file
3. Select employee and press Open Apple Z
4. Put cursor on item to be changed, press Open Apple E and insert new material
5. When finished, press Open Apple P (select list) and print your results.

EMPLOYEE DATA BASE II

SITUATION: As a supervisor you want to promote excellence in your sales area. You are going to award the salesperson with the highest sale total.

ASSIGNMENT: Using the data base file Feb Sales, determine which salesperson should receive the award.

1. Boot up Appleworks
2. Select Feb Sales file
3. Press Open Apple P and get a report format (select sales)
4. Use Open Apple D, delete all categories except customer number, item, quantity, purch, and salesperson.
5. Put cursor on salesperson and press Open Apple G, answer yes to group totals
6. Put cursor on purchases and press Open Apple T to total categories, use 2 decimals and three spaces
7. Press Open Apple P to print

Questions:

1. Which salesperson would receive the award?

   ____

2. Which customer bought the most total quantity of swine items?

   ____

3. Which customer bought the most total quantity of beef item?

   ____

4. Which customer bought the most total quantity of dairy items?

   ____

5. What advantages can you see with using a data base for collecting information concerning promotions?

KEEPING CURRENT WITH NEW DEVELOPMENTS IN AGRIBUSINESS

SITUATION: As a supervisor, it is important to have the employees keep up to date on new technologies.

ASSIGNMENT: Using the magazines in the ag class or library, answer the following questions:

1. What new products have you found in the areas of swine, beef, dairy, and sheep?

2. What new government regulations would affect employees of a feed and livestock operation?

3. What new innovations have been developed in the livestock area?

4. As a supervisor, how would you be sure your employees would get this information?

ANALYZING PERFORMANCE GAPS

Ask yourself...	**Appropriate action...**
What's the matter? What do I expect? What specifically does the employee say/do? What are the results?	Describe the gap in writing
Is expected behavior important? Is it worth my time and effort? Does it affect their performance?	Not Important? IGNORE IT
Is employee aware there is a problem? Does the employee know what is expected? Does employee know that his or her behavior is not satisfactory?	Not aware? GIVE FEEDBACK
Does employee know how to solve it? Does the employee have the necessary skills or knowledge? Has the employee ever performed the task well before?	Doesn't know how? GIVE FEEDBACK TRAIN COACH ARRANGE PRACTICE
Does employee want to do it? Is performance punished? Is nonperformance rewarded? Does performance matter? Are obstacles overwhelming?	Doesn't want to? GIVE FEEDBACK CHANGE CONSEQUENCES REMOVE OBSTACLES COUNSEL MOTIVATE
Does employee have potential? Is employee capable of learning? Is employee suitable for this job? Is it worth your time and effort to solve the performance gap?	No potential? GIVE FEEDBACK REASSIGN* TERMINATE

*You should consider reassigning an employee only if there is a position for which s/he may be suited.

What's the matter?

Before attempting to solve a performance gap, describe it in writing. Be as specific as possible, stating:

1. Management's expectations.
2. The employee's actions.
3. The results.

Unless you can define a problem specifically, you can't begin to solve it. For example, the statement "Pat doesn't sell enough customer labor," is vague. What's enough? Put it in writing:

> Each technician is expected to sell a minimum of 80% of their time. We will be able to charge out 50% of Pat's time the first week and 60% the second week.

Is expected behavior important?

Before spending any more time on a performance discrepancy, ask yourself: Is it worth it? Does this gap affect the employee's performance?

Think of one example of behavior from one of your friends that disturbs you, but, according to the rule of thumb, you should ignore:

Examples of behavior you may need to ignore are:

Matters of personal style or taste - such as favorite foods, clothes, etc.

Leisure or after-work activities that do not affect work.

Personal mannerisms such as the way one laughs, gestures, walk, etc. (None of which you'd probably have any success changing anyway, since these characteristics tend to be deeply ingrained from infancy.)

Lifestyle, values, beliefs that do not reflect poorly on your dealership or its policies.

Is employee aware there is a problem?

Once you are convinced that you are dealing with a genuine performance gap that's important to eliminate, ask yourself the first obvious question: Is the employee aware of it?

Does the employee know what is expected?

Does the employee know that his or her behavior is unsatisfactory?

If, for example, Pat knows that the standard is 80%, but the service manager has never said anything if he made 50% or 60%, Pat may erroneously decide that there is no standard that matters. The key is to GIVE FEEDBACK - specific, immediate feedback.

Does employee know how to solve it?

Assume that there is a performance gap, that it's important, and the employee is aware of it. In solving our concern, we are standing at a very important junction - the split between problems that can be solved through training and those that can be solved through motivation (or changing attitudes).

The key is to answer the question: Does the employee know how to solve it?

Does the employee have the necessary skills or knowledge?

Has the employee ever performed the task well before?

Assume, for example, that Pat used to make the 80% goal. Then, about a year ago, the number began slipping to the current all-time low of 50%. This tells you that Pat has the knowledge and skills required (after all, he used to do it). So, the problem is probably not a skill deficiency that could be solved through training, coaching, and arranging practice. The manager is probably facing an attitude problem.

However, if Pat were a new technician who had no training on the equipment, perhaps a better solution would be to provide training, coaching, and on-the-job practice.

Does the employee want to solve it?

If an employee knows how to do something correctly, but for some reason isn't performing at standard, you are faced with a much tougher problem - the challenge of motivating someone.

Let's briefly look at some of the factors that might influence whether or not someone wants to perform:

Is performance punished?

Is nonperformance rewarded?

Are obstacles overwhelming?

Punishing performance:

Ideally, people should be rewarded for doing something correctly and punished for not performing. But life is more complex than this.

Rewarding nonperformance:

In other cases, nonperformance may be inadvertently rewarded. Assume that after Pat has slipped in time that can be charged out, he begins arriving at the dealership earlier. The service manager compliments Pat on this and gives him more responsibility for helping schedule work (which Pat loves). Pat's nonperformance has been rewarded.

Making performance matter:

Sometimes, management acts as if it didn't matter if an employee performs or not. Assume that the manager ignores Pat's failure to make the 80% standard and gives no feed back. Pat may conclude that it's more important to get to work early than to be efficient on the job.

Ideally, performing correctly would be rewarded, nonperformance punished, and the reward or punishment would be something that the employee cared about.

Overwhelming obstacles:

Sometimes, overwhelming obstacles seem to prevent employees from performing at standard. These could be personal problems, a car that needs repair, marital troubles, a drinking problem that prevents Pat from concentrating on his work. Or, they could be obstacles created by the dealership itself.

For example, suppose the dealer heaped so many different jobs on Pat that he could not become efficient on any of them. The solution to these problems is to remove the obstacles. But this is not always easy, particularly if the cause is beyond the manager's control. Solving performance gaps due to poor motivation can be difficult.

Does employee have potential?

Before you spend all your time and energy solving a performance gap problem, ask yourself: Does this particular employee have potential?

Is employee capable of learning?

Is employee suitable for this job?

Is it worth your time and effort to solve the performance gap?

If not, then you may want to take actions to reassign or terminate the employee.

PROBLEM AREA 5

WHAT ARE THE STEPS IN RECOMMENDING A PROFITABLE RATION?

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PROBLEM 5: What are the steps in recommending a profitable ration?

INTEREST APPROACH:

Into three separate containers, pour three different rations. Give students a sheet of paper listing the contents of each ration and the prices per 100 pounds of the nutrients in each ration. Have students figure the cost per ton of each of the rations. Compare the costs of each ration and what caused the differences in ration costs.

STUDY QUESTIONS:

1. What factors must be considered when determining a ration?
2. What are different methods of preparing a ration?
3. What factors determine the cost of a ration?
4. How is a least-cost ration formed?
5. Where can ingredients be purchased for livestock rations?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Make intelligent decisions. Student Learning Activity #2 and 5.

Communicate with people in the industry. Student Learning Activity #3 and 5.

Apply general principles to particular situations. Student Learning Activity #2, 3, 4, and 5.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Solving a least-cost ration. Student Learning Activity #2.

Calculation and computer computation of a least-cost ration spreadsheet. Student Learning Activity #2 and 4.

Communication with industry representatives when calculating ration costs. Student Learning Activity #5.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determining least-cost rations. Student Learning Activity #2.

Analyze a ration and determine different inputs to form a least-cost ration. Student Learning Activity #5.

Interpret feed tags and understand ingredients that are contained in the feed. Student Learning Activity #1 and 3.

STUDENT ACTIVITIES:

1. Have each student bring three different feed mixtures to class and compare method of preparation, costs, livestock to which they are to be fed, and age of livestock. Using TM-1, 2, and 3, summarize the options in selecting a ration.

2. Review and discuss TM-4. Have students form a simple ration using the Pearson Square and determine its cost. (INFO-5 and ACT-6.)

3. Develop a spreadsheet forming a least-cost ration. Using ACT-6, have students create a spreadsheet to calculate the different costs between rations. Have students complete ACT-7.

4. Visit a feed mill to examine the different types of proteins available and the advantages of each. Use ACT-8 for the students to fill in while on a field trip.

5. Using TM-9 and ACT-10, have students survey local feed stores to determine where to buy feed ingredients and compare costs.

CONCLUSION:

Factors in determining the most economical ration:

Cost of feed.

Total digestable nutrients.

Digestable protein.

Energy supplied.

Different methods of preparing a ration:

Grinding

Rolling

Pelleting or cubes

Chopping

Cooking

Steam flaking

Factors to consider in determining the cost:

Cost of ration depends on age of the animal and feed ingredient costs.

A ration is evaluated by its performance; i.e., cost per pound of gain, average daily gain, and feed conversion. Best performance may not be on a least-cost ration.

Least-cost rations are calculated by listing ingredients needed for a ration and their cost. These rations are compared to each other by protein content and cost of the total ration.

Feed ingredients can be purchased through local elevators, feed supply dealers, and catalog feed sales.

EVALUATION:

As a result of this lesson, students will be able to:

List factors in determining a balanced ration.

Use the Pearson Square to formulate a ration.

List local places to purchase feed and feed ingredients.

Prepare a least-cost ration.

List factors effecting the cost of a ration.

OPTIONAL LEARNING ACTIVITIES:

1. Invite a local feed salesman to class to compare different feed choices.
2. Have students form rations for a species from birth to market.

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DETERMINING RATION TO USE

#1. Age of animal to be fed

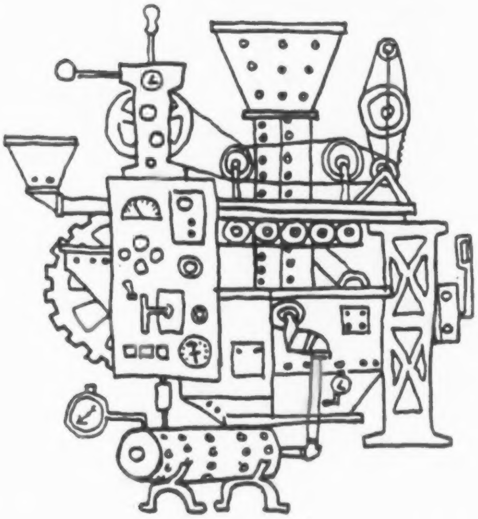
#2. Cost of ration

#3. Performance from the ration used

#4. Availability of the ration

METHODS IN PREPARING A RATION

- * Grinding
- * Rolling
- * Pelleting or cubing
- * Chopping
- * Cooking
- * Steam Flacking



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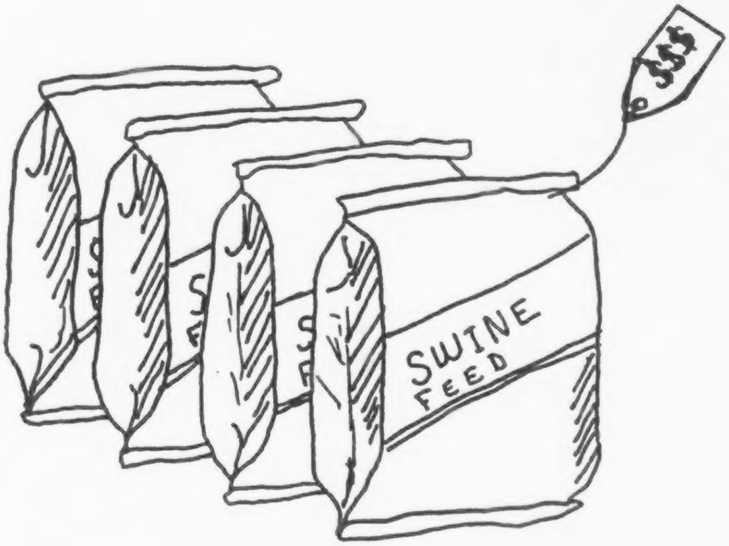
FACTORS AFFECTING ECONOMICAL RATIONS

* Cost of feed that is used

* Total digestable nutrients in the feed

* Digestable protein in the ration

* Energy supply the ration provides

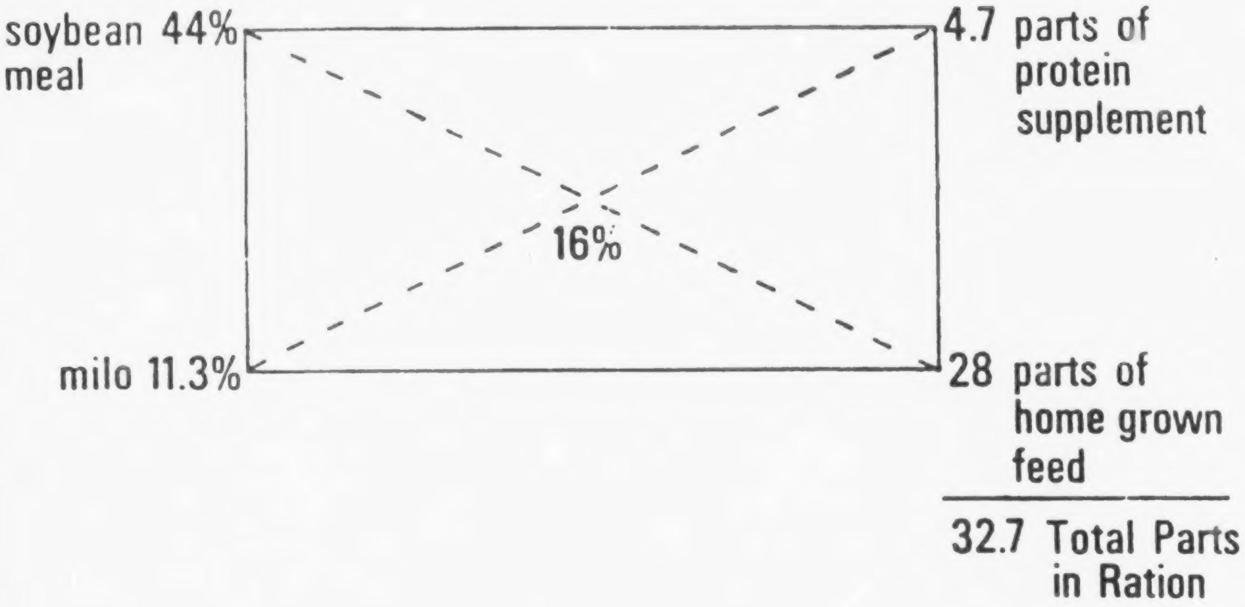


PEARSON'S SQUARE EXPLANATION

PROCEDURE FOR BALANCING A RATION ACCORDING TO PEARSON'S SQUARE.

1. DRAW A SQUARE WITH DIAGONAL DOTTED LINES.
2. PLACE THE DESIRED PROTEIN LEVEL OF THE RATION IN THE CENTER OF THE SQUARE.
3. PLACE THE PERCENTAGE PROTEIN OF THE TWO FEEDS BEING USED AT THE CORNER OF THE SQUARE.
4. SUBTRACT FOLLOWING THE DOTTED LINES.
5. THE RESULTS, DIRECTLY ACCROSS THE SQUARE, INDICATE THE NUMBER OF PARTS OF EACH FEED NEEDED IN THE RATION TO BALANCE IT.

PEARSON'S SQUARE


soybean 44% meal
4.7 parts of protein supplement
16%
milo 11.3%
28 parts of home grown feed
32.7 Total Parts in Ration

PEARSON SQUARE METHOD

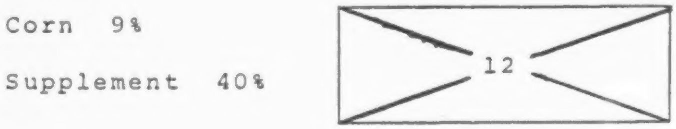
This is an easy method to balance a ration for protein:

Problem I

Need 12% crude protein in a concentrate mix for steers. How many pounds of corn, 9% crude protein, and pounds of protein supplement, 40% crude protein, are needed in a 100-lb. mixture?

Step 1.

Construct a square, putting the percent crude protein of the ration in the center. Put the percent protein of the corn and percent protein of the supplement in the two left-hand corners of the square.



Step 2.

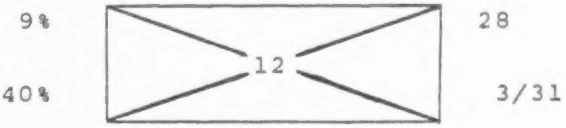
Subtract diagonally the smaller number from the larger number:

12 - 9 = 3 ; & 40 - 12 = 28.

Add the two remainders: 28 + 3 = 31

Step 3.

In 31 lbs. of feed there would be 28 lbs. of corn and 3 lbs. of supplement.



Step 4.

Determine the 100-lb. mixture by calculating the percent of each feed in the mixture:

3/31 x 100 = 9.7 lbs. supplement
28/31 x 100 = 90.3 lbs. corn
100.0

Step 5.

Check the mixture for protein:

90.3 lbs. corn x .09 = 8.13
9.7 lbs. sup. x .40 = 3.88
12.01

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Step 5.

Check:		Pounds of Protein
Milo	62.2 x 0.105 =	6.53
Corn	31.1 x 0.09 =	2.80
Supplement	6.7 x 0.40 =	2.68

Sample Problems

Problem 1

Need 12% crude protein in the concentrate portion of a steer ration. In a 100-lb. mix, how many lbs, of corn and how many lbs. of a 40% protein supplement will be needed?

(a) Corn 8% crude protein
(b) Corn 10% crude protein

Problem 2

On the basis of current prices for corn, soybean meal, ground limestone and dicalcium phosphate, nutrients have the following cost.

	Price/lb. Cents
Crude protein	4.7
TDN	2.12
Calcium	1.03
Phosphorus	21.3

Give the following analysis of soybean meals, what is their value per 100 lbs. as a source of nutrients.

	Crude Protein %	TDN %	Ca. %	Phos. %
SBOM	41	78	0.27	0.63
SBOM	44	76	0.29	0.64
SBOM	50	79	0.26	0.62

DETERMINING RATION CONTENT

Sample Problems

Problem 1: Need 12% crude protein in the concentrate portion of a steer ration. In a 100-pound mix, how many pounds of corn and how many pounds of a 40% protein supplement will be needed?

(a) Corn 8% crude protein
(b) Corn 10% crude protein

Problem 2: On the basis of current prices, corn, soybean meal, ground limestone and dicalcium phosphate, nutrients have the following costs: (Call local elevator for current prices.)

	Price/pound Cents
Crude protein	4.7
TDN	2.12
Calcium	1.03
Phosphorous	21.03

Given the following analysis of soybean meals, what is their value per 100 pounds as a source of nutrient?

	Crude Protein %	TDN %	Calcium. %	Phosphate %
SBOM	41	78	0.27	0.63
SBOM	44	76	0.29	0.64
SBOM	50	79	0.26	0.62

DETERMINING THE COST OF A RATION

Row			# of Ration	Cost/CWT	Cost/Item
10	Energy Feed	= Corn (C10)	1550 (E10)	$ 3.00 (G10)	$ 46.50 (I10)
14	Protein Feed	= Soybean Meal (C14)	425 (G14)	$13.25 (G14)	$ 56.31 (I14)
18	Premix	= Super 100 (C18)	10 (E18)	$20.00 (G18)	$ 2.00 (I22)
22	Miscellaneous	= Salt and Minerals (22)	15 (E22)	$ 7.50 (G22)	$ 1.12 (I25)
25	TOTAL		2000 (E25)		$ 105.94 (I25)

*Number in ( ) equals corresponding cells

Situation: The cost of a ration can prove to be the difference between profit and loss on an enterprise.

Assignment: Using the above data, develop a spreadsheet that will calculate various costs of different rations.

1. Boot up Appleworks.
2. Select "Add a File" and select "Spreadsheet."
3. From scratch type in "Ration,Cost."
4. Before starting set up column widths arrow over to column D, and narrow to 4 spaces.
5. This is done by pressing Open Apple L (for layout).

6. Select columns, press return, highlight, then press return.
7. Highlight column widths and press return.
8. To narrow the column, use the Open Apple <--- key.
9. Do the same for columns F and H.
10. Begin the title on cell (E5) and type in the title of your program.
11. Enter data on corresponding rows (if a mistake is made, press esc).
12. Before a line is typed in, use " before entering dashes.
13. To add rows, place cursor in cell (E22) and enter @sum(then arrow up to cell E10, press ., and highlight to (E22), press return to finish the formula enter) and press return.
14. To calculate cost per item, put the cursor in cell I10. Press + sign and move arrow over to cell E10, press the * sign and arrow over to cell G10. To finish the calculation, enter the / sign and enter 100 and press return.
15. Do the same steps for cells I14, I16, and I18.
16. To add cells I10 through I18 repeat procedure used in Step 12.
17. To enter dollar values, put cursor in column I, press Open Apple L, and select values and select dollars two decimals. Do the same for Column G.

Row				# of Ration	Cost/CWT	Cost/Item
10	Energy Feed	=	Corn	1550	$ 3.00	+E10*G10/100
14	Protein Feed	=	Soybean Meal	425	$13.25	+E14*G14/100
16	Premix	=	Super 100	10	$20.00	+E18*G18/100
	Miscellaneous	=	Salt and Minerals	15	$ 7.50	+E22*G22/100
	TOTAL			@SUM(E10.E22)		@SUM(I10.I22)

DETERMINING COST EFFECTIVE RATIONS

Through feed tests,
the following results have occurred

Ration A	15%	Ration yields	Feed eff	2.7
			Rate of Gain	1.7
Ration B	14%	Ration yields	Feed eff	2.9
			Rate of Gain	1.6
Ration C	13%	Ration yields	Feed eff	3.0
			Rate of Gain	1.5
Ration D	12%	Ration yields	Feed eff .	3.2
			Rate of Gain	1.3

Determine the composition of each ration using 8.5% ration for corn and 40% protein for soybean meal. If your customer bought 40 pound pigs and expects to feed them to 220 pounds, which ration would be the most cost effective? (Use your Pearson Square and spreadsheet knowledge to develop a program to perform your calculations.)

Ration A Pounds Needed ______ Cost ________

Ration B Pounds Needed ______ Cost ________

Ration C Pounds Needed ______ Cost ________

Ration D Pounds Needed ______ Cost ________

Which ration would you suggest to your customer?

BUYING PROTEIN

Assignment: While on the field trip to the elevator, answer the following questions:

1. Where are proteins purchased?

2. How often is the protein ordered?

3. Why are so many different proteins purchased for each type of livestock?

4. What are the procedures for ordering proteins?

5. What type of record keeping system is used to keep track of protein orders?

6. What type of evaluations are used to test the performance of each protein?

7. What recommendations do the dealers offer the producer in selecting a protein?

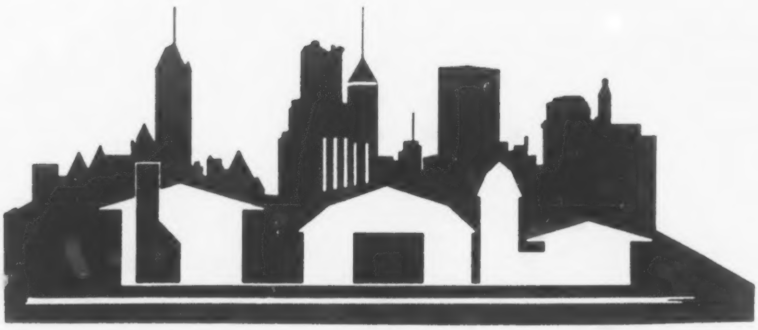
PLACE TO PURCHASE LIVESTOCK SUPPLIES

#1. Local Elevators

#2. Feed Dealers

#3. Supply Stores

#4. Catalogs



PLACES TO PURCHASE LIVESTOCK SUPPLIES

Name ______________________

INSTRUCTIONS: Have the students contact local businesses to determine where to purchase the following livestock supply products. Have students list the prices for each of the supplies.

	Place of Purchase	Cost
1. Hog wormer		
2. Salt block		
3. Syringe needles		
4. Soybean meal		
5. Scoop shovel		
6. Baler twine		
7. Injectable iron		
8. Fly bait		
9. ASP-250		
10. Tylan 200		
11. Sulfa		
12. 18% Creep feed		
13. Rabbit pellets		
14. Aureomycin		
15. Mange spray		

PROBLEM AREA 6

WHAT ARE THE TECHNIQUES OF SELLING WHEN MAKING FARM VISITS?

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LSS-6

PROBLEM 6: What are the techniques of selling when making farm visits?

INTEREST APPROACH:

Have students bring samples of feeds and the feed content information from the feed bag from different feed companies for fattening hogs. Have students compare the contents of each feed and the prices of the feeds per ton. Discuss the advantages of each feed. Have several students select one of the feeds and role play before the class how each would sell that feed to a hog producer on his farm.

STUDY QUESTIONS:

1. What is meant by an opening statement and what does it include?
2. What type of questions should be asked to determine attitude and needs of the customer?
3. What type of statements would aid in selling a prospect?
4. How can one gain commitment and summarize key needs?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

1. Development of communication skills. Student Learning Activity #5.
2. Create better relations with classmates. Student Learning Activity #5.
3. Creating self-confidence. Student Learning Activity #5.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

1. Improve students' communication skills. Student Learning Activity #3 and 5.
2. Develop problem solving skills. Student Learning Activity #2 and 3.
3. Improve students' writing and spelling skills. Student Learning Activity #1, 2 and 3.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

1. Improve questioning skills. Student Learning Activity #1, 2, 3, 4 and 5.
2. Improve decision-making skills. Student Learning Activity #2, 3, and 5.
3. Distinguish between relevant and irrevelant information. Student Learning Activity #2, 3, and 4.

LEARNING ACTIVITIES:

1. Using TM-1 and TM-2 discuss the the steps in leading a customer into a sale. Hand out ACT-3 and have students complete the worksheet on open and closed statements.
2. Using TM-4, discuss the six points of selling a product. Hand out ACT-5 and 6 and have students determine the different attitudes of various types of sales prospects.

3. Have students make a list of the various items they have purchased in the last week and explain what need was met by each purchase. Discuss the type of needs that people posses. Hand out ACT-7 for students to evaluate customer's needs.

4. The final step in selling is to gain commitment from the customer. Using TM-8 discuss the procedures in closing a sale. Also discuss the Do Nots with TM-9. After discussion hand out ACT-9 for students to complete.

5. Have students role play selling a livestock product with each one having the opportunity of being both a salesman and customer. Have others score their performance on ACT-11.

CONCLUSION:

The best way to catch a prospective customer's interest is by getting straight to the point in your opening questions.

Tell who you are.

Tell the purpose of the visit.

Tell how it will benefit the customer.

Use the business name in all discussion.

Let the customer know the name of the person handling the sale.

Find out the customer's name and remembering it.

Determine the customer's need and trying to fill it.

Ask open questions for general information, ask closed questions for specific information.

Ask questions for details of operation, plans, expansion possibilities, and problems that they may have.

Establish a quality atmosphere.

Sell significant benefits of the merchandise.

Point out the superior features of the merchandise.

Emphasize exceptional values.

Sell the experience and reputation of the business.

Sell friendly reliable serve.

There are many statements that will aid in the selling of a product.

Show benefit of the product and the features of the products.

Discover the customer's needs:

Finding out what the customer consciously or unconsciously looks for, wants, or needs. Behind every sale of a product is a motive--a reason for buying. The customer's buying motive is never the desire to own the product itself, but rather to gain something the product will provide.

Determine needs. What product does the customer want and what are the reasons for buying one product over another. Basically, a customer buys to satisfy one or more of the following wants or needs: safety, comfort, economy, or prestige.

Ask questions. It is essential to most sales that you ask questions. Ask questions that require more than a simple yes or no answer. Since many customers are not very talkative, watch facial expressions carefully. They can give you additional clues to his/her needs.

Listen. Listen intently to the customer's answers. Be alert and listen for clues that will indicate what the customer wants and needs most. By being a good listener the salesman will get that customer to be much more attentive when recommending a product.

It is important to close the sale properly:

The customer will be expecting the salesperson's advice and looking to the salesperson as the expert--as the person who knows which product is most appropriate. Recommend a specific product and present it to the prospective customer. The selection and recommendation of the right product to the prospect is a matter of experience and judgement. The important thing to remember during this step is that of arousing the customer's interest. Focus customer's attention on a new product and give the customer something to think about.

If the evidence has been presented, it should naturally follow that the salesperson verify that the customer is satisfied with the product and then ask for the sale. This should be done as soon as possible. However, do not "high pressure" the prospects.

Do not make the customers feel that they are being forced into buying.

Don't let the propect know how much the sale means.

Don't be apologetic, particularly in quoting price.

Don't make a ceremony out of closing, lest the prospect becomes frightened.

Don't give the prospect an excuse or an opportunity to back away from the purchase.

Don't ever ask the prospect for the buying decision in such a way that he can answer with a "Yes" or a "No" for the latter closes the door.

Don't make it difficult for the prospect to complete the purchase quickly if the prospect cares to do so.

Don't let the prospect miss seeing that the salesperson expects the prospect to buy.

Don't make it easier for the prospect to refuse than to buy.

Summarize what has been learned from the customer and give benefits of your product and then ask for a commitment.

EVALUATION:

Upon completion of this lesson, students will be able to:

Prepare open and closed questions.

Distinguish between a feature and a benefit of their product.

Use questions to determine the attitude of the customer.

Be able to summarize and confirm a commitment from a customer.

OPTIONAL LEARNING ACTIVITIES:

1. Invite an area salesperson to class to discuss advantages and disadvantages of a selling career.
2. Have students interview area salespersons about the duties and requirements of their jobs.

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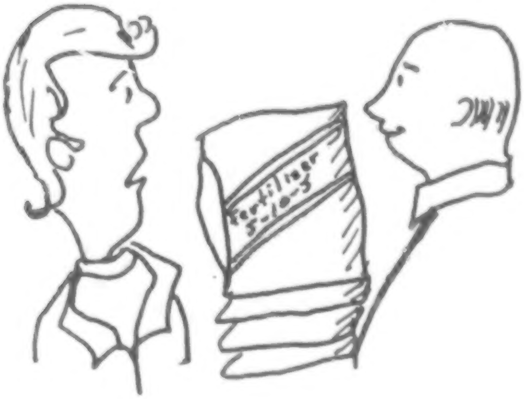
When Leading the Customer to a Sale



Use the business name in all discussions

Tell the customer your name

Find out and remember customer's name

Determine customer's needs

Steps to a Successful Sale

Interest the customer in the merchandise and your ideas.

Convince the customer of the need for the merchandise.

Ask for the sale.

Sell customer quality.

Name ________________________

OPENING STATEMENTS

Your Opening Statement is one of the most important parts of a sales call. Not only is it important to get off on the right foot when you make a cold call on a feeder you've never met before, but it's also necessary when you call on your good, loyal customers. That first impression is vital no matter who you're talking to.

There is only one test of a successful Opening Statement: Does it make the feeder want to hear more?

The best way to catch a feeder's interest is by getting straight to the point in your Opening Statement. The most efficient way of doing this is by following these three steps:

- Tell who you are, if necessary
- Tell the purpose of your call
- Tell how it will benefit the prospect

A good professional Opening Statement will also help you overcome the attitude of indifference. A customer or prospect who is indifferent is satisfied with what he's doing now and doesn't see a need for NEW AG products, programs, or services. Therefore, he doesn't see much point in spending time talking to you. If you make that feeder want to hear more in your Opening Statement, you are on your way to overcoming indifference.

OPENING STATEMENTS: EXERCISES

Read the following Opening Statements.

Opening Statement 1: (A call on a hog feeder who Max has never done any business with before).

Max: Good morning, Mr. Ames. I'm Max Benny, and I'm with Hometown Feed and Supply, the local New Ag Dealer. I dropped by today to get acquainted and to tell you a little bit about our Hog Feed Program for hogs. This program has improved feed efficiency for a lot of hog feeders, giving them higher returns.

UNDERLINE the part of Opening Statement 1 that tells the PURPOSE of the call.

No Opening Statement is complete unless it also tells the feeder how the call will benefit him. CIRCLE the part of Opening Statement 1 that tells the BENEFIT.

The best way to get off on the right foot in your sales call is by making a good Opening Statement. It should be brief and focus on your PURPOSE for calling and the BENEFIT to the feeder.

In Opening Statement 1, Max went straight through the three steps. This is not always the case. Sometimes, your Opening Statement will be part of the normal flow of conversation, as you will see in the following Opening Statement.

Opening Statement 2: (A call on a dairyman who is a New Ag customer).

Max: Hi, Jim. I stopped by to see if you got your brochure in the mail.

Jim: Can't say that I did. Of course, I haven't had time to look at any of my mail yet.

Max: I'm glad I stopped then. The brochure was inviting you to our feeder meeting on Wednesday.

Jim: What's it about?

Max: Our New Ag District Manager's going to be telling you about our Calf Program and how it can possibly prevent some problems by giving you a total management program.

UNDERLINE the part of Opening Statement 2 that tells the PURPOSE of the call.

CIRCLE the part of Opening Statement 2 that tells the BENEFIT.

As you can see from Opening Statement 2, this skill has two useful purposes. Not only will it get you off to a good start on sales calls, but it will also get you started in a good, business-like way with your regular customers.

OPENING STATEMENTS: REVIEW

A good, professional Opening Statement has three steps. They are...

(Write out your answers).

____

____

____

Read each of the following Opening Statements carefully. Decide if they are COMPLETE or INCOMPLETE.

Opening Statement 3: (A call on a cattle feeder Larry doesn't know).

Larry: Hello. I wanted to visit with you today about your brood cow operation and tell you a little bit about some of our cattle programs that could make you more money.

Is Opening Statement 3 complete or incomplete?

_____ Complete

_____ Incomplete

If you marked Opening Statement 3 incomplete, which element was missing?

____

____

PLANNING AN OPENING STATEMENT FOR THREE FEEDERS

1. NEW CALL

Think of a new call you could make on a feeder in your community. Write an Opening Statement telling who you are (if necessary), what the purpose is, and how it will benefit him.

WHO (if necessary): ______________________________

____

PURPOSE: ______________________________

____

____

BENEFIT: ______________________________

____

____

2. TOUGH PROSPECT

Think of a tough prospect and how you might approach him to make a sales visit. Write an Opening Statement telling who you are (if necessary), what the purpose is, and how it will benefit him.

WHO (if necessary): ______________________________

____

PURPOSE: ______________________________

____

____

BENEFIT: ______________________________

____

3. ESTABLISHED CUSTOMER

Think of an established customer (maybe your dad) in the community. Write an Opening Statement telling who you are (if necessary), what the purpose is, and how it will benefit him.

WHO (if necessary): ________________________________

____

PURPOSE: ____________________________________

____

____

BENEFIT: ____________________________________

____

____

Six Points for Selling Quality

#1. Establish a quality atmosphere

#2. Sell significant benefits of merchandise

#3. Point out the superior features of the merchandise

#4. Emphasize exceptional values

#5. Sell the experience and reputation of the business

#6. Sell friendly reliable service

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Name ______________________

QUESTIONING FOR ATTITUDE AND NEED: EXERCISES

Read the following questions. Decide if they are open or closed. Write O or OPEN and C for CLOSED. Then, after each group of questions, decide in which area of questioning the salesperson is asking his questions.

Questions to a dairyman with a Holstein herd who buys from the competition.

_____ How do you feel about the feeding program you have your cows on now?

_____ How many cows are you milking at this time?

In which of the four areas is the above salesperson questioning?

_____ Attitude toward your Dealership and New Ag

_____ Details of prospect's operation

_____ Plans for change or expansion

_____ Recognized needs or problems

Questions to a farrow-to-finish hog producer.

_____ Have you ever thought about introducing Super Trimm gilts into your herd to get better mothering ability out of your sows?

_____ How are hog prices going to affect your plans for next year?

In which of the four areas is the above salesperson questioning?

_____ Attitude toward your Dealership and New Ag

_____ Details of prospect's operation

_____ Plans for change or expansion

_____ Recognized needs or problems

Questions to a cattle feedlot operator.

_____ Why do you feel that way about New Ag?

_____ Have you tried our Receiving Program before?

_____ Why did you stop using New Ag?

In which of the four areas is the above salesperson questioning? (Write out your answer).

____

____

Questions to a poultryman who has a large laying-operation.

_____ Are you having any trouble with shell quality?

_____ How is your current lighting program working for you?

_____ What is your feed intake per 100 birds per day?

In which of the four areas is the above salesperson questioning? (Write out your answer).

____

____

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OPEN QUESTIONS: HOW TO USE THEM

Opening questions are extremely useful because they can gather a large amount of information in a short period of time. Because this kind of question is so useful, you should use it for the following purposes...

- To start your call
- To gather general information
- To question the prospect or customer when he is willing to talk

Starting to call with an open question makes sense. It gives the feeder a chance to talk freely and allows you to gather the general information you need to meet his needs. On the other hand, if you start a sales call with a closed question like, "Do you need anything today?" You may find the conversation ended before it really gets started.

It also makes sense to use open questions when your prospect is willing to talk. Closed questions might start limiting his answers. Open questions will encourage the flow of information you need.

OPEN QUESTIONS: EXERCISES

In each of the following situations, write an OPEN question that would start the feeder talking about his needs. You may not be completely familiar with the situations presented below. However, you should be able to come up with an open question for each of the situations.

Situation 1:

You are calling on a dairyman who uses some New Ag products. You think he could really benefit from the New Ag High Milking Program, but you aren't sure how much he knows about it.

You ask: ____

____

Situation 2:

You are calling on Bud Smith, a good feeder pig operator, who has been reluctant to buy any New Ag Health Products. However, he did attend a feeder meeting and learned about New Ag BB3. After the meeting, you call on him and...

You say: Bud, you were at our feeder meeting. How do you feel about New Ag BB3 now?

Bud: Well, I don't know. I like what you had to say, but I'm still not sure it will do as good a job as what I'm currently using.

Bud seems willing to talk. You want to find out what he is concerned about.

You ask: ____

____

Situation 3:

You are calling on Jerry Wiggley, who is a cattle feedlot operator. After introducing yourself...

You say: Jerry, what shape were your feeder cattle in when you received them?

Jerry: Overall, they did not look too bad. I'm pretty well satisfied with them. There are a few that could be better, but I guess I'll just have to live with the problem.

Jerry seems willing to talk, and he has indicated he has a problem, although he thinks it can't be solved.

You ask: ____

____

Name ______________________

SUMMARY OF NEEDS: EXERCISES

Read the following situations and answer the questions about them.

Situation 1:

You are talking with a farrow-to-finish hog producer. He's told you he doesn't think his pigs from 50 to 80 pounds are getting the nutrition they need on the 14% ration he's feeding. He's thinking about switching to a 16% ration.

You say: You're not satisfied with the nutrition your pigs are getting from 50 to 80 pounds on the 14% ration, and you're thinking of going to a higher protein ration. Is there anything else important you'd like to add?

Underline the sentence in Situation 1 that summarized this hog producer's needs, then check your answer.

Circle the sentence that verified the needs, then check your answer.

The question which verified the needs was...

_____ Open

_____ Closed

Situation 2:

You are talking with a cattle feeder who finishes about 500 head of feeder cattle. He tells you he can't get his new cattle to eat. He needs a program that will get them eating, so they can gain weight lost during shipment.

You say: Those new cattle are not gaining as you'd like them to, because they're not eating. That means you're looking for a good way to get them on feed.

Was that Summary of Needs complete?

_____ Yes

_____ No

If it was not complete, what was missing?

_____ Brief Summary of Needs

_____ Closed question to verify the needs

A Summary of Needs has two steps. They are:

____

____

____

____

When Closing a Sale

Display a friendly manner at the close.

Have all materials and equipment that will be needed.

Realize that begging for a sale makes the salesperson and the offer look bad.

Ask the prospect to "OK" or approve the order rather than sign it.

Make buying as easy and painless as possible.

Try for privacy at the close.

Study each prospect as a baseball pitcher studies each batter.

Lead the prospect to think of himself as the owner of the product from the beginning of interview.

When Closing a Sale, Do Not

Let the prospect know how much the sale means.

Be apologetic, particularly in quoting price.

Make written or even oral promises unless authorized to do so.

Make a ceremony out of closing.

Give the prospect an excuse or an opportunity to back away from the purchase.

Ever ask the prospect for the buying decision in such a way that he can answer with a "Yes" or a "No".

Make it difficult for the prospect to complete the purchase quickly if the prospect cares to do so.

Let the prospect miss seeing that the salesperson expects the prospect to buy.

Make it easier for the prospect to refuse than to buy.

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Name ______________________

GAINING COMMITMENT: EXERCISES

There are three situations when you should summarize key needs and benefits.

- When you meet resistance during your Recommendation. You must handle the resistance first, then summarize again before asking for commitment.
- When you are interrupted during your Recommendation.
- When you make a Recommendation on one call and ask for commitment on another call.

Read the following situation and answer the questions.

> You are calling on a hog feeder. During questioning, you discover that some of his hogs have lungworms. He needs a wormer he can mix with his ground grain.

You say: You need a wormer you can mix right in your ration, is that right?

What kind of statement was that?

_____ An Opening Statement

_____ A Summary of Needs

_____ A Summary of the Key Needs and Benefits

The hog feeder agrees he has this need, so you present the features and benefits of New Ag Swine and Cattle Wormer Concentrate that will meet his needs. After your Recommendation...

You say: You've said you need to get rid of the lungworms that are costing you money. And you've agreed that Swine and Cattle Wormer Concentrate will take care of your worm problem and be easy for you to use with your own grain.

What key need was summarized above?

____

What key benefits were summarized above?

____

____

After summing up the key needs and benefits, what should you do?

____

SALES DEMONSTRATION RATING

Students: ______________________________, ___________________________

Rate each sales demonstration using the following criteria:

	High				Low
Greeting	5	4	3	2	1
Discovered customer's needs	5	4	3	2	1
Recommended a product	5	4	3	2	1
Explained product benefits and features	5	4	3	2	1
Closed sale	5	4	3	2	1

PROBLEM AREA 7

A DELIVERY PERSON HAS MANY RESPONSIBILITIES IN WORKING IN A FEED AND LIVESTOCK COMPANY. WHAT RECORDS AND FORMS NEED TO BE COMPLETED BEFORE A DELIVERY OF A FEED CAN BE ACCOMPLISHED?

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PROBLEM 7: A delivery person has many responsibilities in working in a feed and livestock company. What records and forms need to be completed before a delivery of a feed can be accomplished?

INTEREST APPROACH:

Present the class with several feed rations that a farmer might order and have delivered to his farm. Have the students identify the step by step process involved before the feed is actually delivered.

STUDY QUESTIONS:

1. What information should be included on a feed order form?
2. What is the difference between an order form and a sales receipt?
3. What are the steps performed once an order is taken from a farmer?
4. Once the feed is mixed and ready to deliver, what are some important procedures to follow to ensure a satisfied customer?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Apply general principles to particular situations. Student Learning Activity #1 and 4.

Use fundamental communication skills. Student Learning Activity #3.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Application of percentage concepts. Student Learning Activity #3.

Take clear and concise notes. Student Learning Activity #1 and 3.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determine the accuracy of a statement. Student Learning Activity #1 and 3.

Distinguish relevant from irrelevant information. Student Learning Activity #1 and 3.

LEARNING ACTIVITIES:

1. Using TM-1, discuss items that should be contained on a feed order form. Hand out ACT-2a and 2b and have students complete a feed order that would be given to a mix-mill person and the information that should be recorded.

2. Hand out INFO-3, 4, and 5 to discuss proper procedures in filling out a sales slip. Using TM-6, summarize mistakes that are commonly made on sales slips. Hand out ACT-7a and 7b and have students complete a sales receipt that will be given to the farmer.

3. Have students contact local elevators for current prices and compare their prices; i.e., grinding, mixing, delivery, bulk discounts.

4. Using TM-8, summarize steps that should be performed when making a delivery of livestock feed to a farmer.

CONCLUSION:

Before a feed order can be processed it is important to record all the information a customer provides. These items include:

Type of ration to be mixed.

Feed additives and withdrawal dates.

Place to put the feed.

Time to deliver the feed.

The order form is the first step in the delivery process.

The order is then sent to the feed mill and processed. After the feed is mixed, a sales receipt is completed to give to the farmer. The feed is then delivered to the farmer at the location specified.

An order form is used to give the information from the customer to the mix-mill person and delivery person informing them of the order.

After the feed has been mixed, a sales ticket is completed to show the cost of the feed to the customer. It is important to a business that the sales in the various departments be kept separate. In doing so, the managers can determine if each department is making a profit.

Several steps are important before a delivery can be made.

The feed delivery person should make sure that before the feed is put into the truck that no residues from previous loads remain; i.e., a load of cattle feed containing rumensin should be washed out before a load of swine feed is emptied into the truck, since rumensin could kill swine. The delivery person should also practice clean sanitation to prevent the spread of disease from farm to farm. The delivery person should be courteous at all times to the customer and listen to suggestions that may be offered by them. Also, the feed should be delivered on time to prevent irritated customers.

EVALUATION:

Upon completion of this lesson, students will be able to:

Properly record orders from customers.

Properly fill out a feed order form.

Make out a sales slip for a feed order.

Compute sales tax.

Figure discounts on livestock merchandise.

List steps to perform before making a delivery.

REFERENCES:

Office Procedures Used in the Agricultural Services. Ohio Agricultural Education Curriculum Material Service. Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

Sales and Use Tax Information Booklet. Taxpayer Services Section, Iowa Department of Revenue and Finance. P.o. Box 10457, Des Moines, Iowa 50306.

Agribusiness Procedures and Records. Lee/Lee, Chapter 1.

Agricultural Business Sales and Marketing, a curriculum material. Instructional Materials Laboratory, University of Missouri-Columbia, Columbia, Missouri. Catalog Number AG-51-1. June 1984.

Farm and Ranch Business Management, an instructional material. Deere and Company, Service and Training Department. John Deere Road, Moline, Illinois 61265.

FEED ORDERS SHOULD INCLUDE:

1. Types Of Rations To Be Mixed
2. Feed Additives Used
3. Withdrawal Dates
4. Place Feed Is To Be Stored
5. Time The Feed Is To Be Delivered
6. Miscellaneous Information (Other Merchandise To Be Delivered Such As Dog Food Or Creep Feed)

NAME______________________

ORDER FORM EXERCISE

INSTRUCTIONS: With the following information, complete the order form:

Bill Brown has called into the New Ag Co-op and has ordered the following:

1 1/2 tons of sow feed to be ground, mixed, and delivered containing:

2,100	pounds of corn
600	pounds of 35% sow
300	pounds sweet bulk

He also wants 100 pounds of litter wean.

The sow feed is to be put in the feeder south of the barn. He would like the litter wean put in the farrowing house.

He also needs it by 10:00 a.m.

ORDER FORM

NEW CO-OP ELEVATOR CO.

TICKET NO. ________ DATE ________________ 19 ________

CUSTOMER ______________________________ TIME ________ A.M

ADDRESS ______________________________ ________ P.M

KIND OF FEED:

INGREDIENT ITEMS	BATCH	POUNDS
CORN MCW		
OATS MCW		
44% SBOM		
35% PIG CON		
50 MIX		
35% SOW		
40% HOG CON		
35% CATTLE		
MINERAL		
SALT		
DRUG:		
TOTAL WEIGHT		

UNLOADING DIRECTIONS:

GRIND ☐

MIX ☐

DEL. ☐

CRACK ☐

DELIVER WHEN:

SPECIAL INSTRUCTION

WARNING

WITHDRAW THIS FEED ________ DAYS BEFORE SLAUGHTER

________ GMS/TON

LOT NO.

MATT PARROTT & SONS CO., WATERLOO, IOWA P-803

NECESSARY STEPS IN CORRECTLY WRITING OUT A SALES TICKET

1. Mark the correct date.

2. Write the customer's correct name and address. If partnership, it should be noted as such. The name and address becomes necessary if the purchase becomes a charge account.

3. Give a complete description of each article sold.

    a. Quantity and unit should be thought of as one item (i.e., 100 lbs.; 10 gal.).
    b. The description should clearly designate the type of merchandise being sold and not merely be a commodity classification. This is necessary for checking price and for inventory controls.
    c. Show the price per unit on all merchandise. (Some sales tickets will have column heading marked "price.") Bill all merchandise at the retail price. If the customer is entitled to a discount because of volume, damage, etc., this amount is then deducted from the retail price.
    d. Extensions must be mathmatically accurate and legibly written.

4. Make a sub-total of the extension.

5. Calculate the sales tax on all taxable items, if any, and enter under the first total.

6. Next, calculate any delivery charges and enter under the sales tax calculations.

7. Add the extension column to obtain the grand total charges for the sale.

8. Check the block on the ticket to indicate the method of payment, cash, check, charge, returned or account.

9. If settlement is to be made by check in an amount different from the ticket total, it is well to note the amount of the check on the face of the sales ticket with the calculation of the charge to be given. A similar calculation is recommended when a large bill is given in payment.

10. Get the signature of the person receiving the merchandise if the settlement is to be other than cash.

11. When a customer pays on account, make out a sales ticket and indicate what he is paying for, i.e., fertilizer, feed, balance on note, etc.

12. In all cases if an employee should ruin a ticket for any reason, the word VOID should be written across the front of the ticket and the original placed with the other tickets. Sales tickets are numbered consecutively and each one must be accounted for at the end of the day's business.

13. The salesman initials the ticket in the appropriate block.

EXAMPLE PRICING POLICY OF AN AGRIBUSINESS

Quantity Discounts (tonnage)

Fertilizer discounts:

5 to 10 ton order	$2.00 per ton discount
11 to 15 ton order	$6.00 per ton discount
16 tons or over	$10.00 per ton discount

Feed discounts:

1 to 5 ton	$2.00 per ton discount (plus 8.00 per ton bulk)
6 to 10 tons	$4.00 per ton discount (plus 12.00 per ton bulk)
11 tons or moe	$6.00 per ton discount (plus 16.00 per ton bulk)

Early Season Discounts

Delivery	Twine	Fertilizer	Seed
December	$ 1 per bale	$6 per ton	$4 per bu.
January	$.80 per bale	$5 per ton	$3 per bu.
February	$.60 per bale	$4 per ton	$2 per bu.
March	$.40 per bale	$3 per ton	N/A
April	$.20 per bale	N/A	N/A

Cash Discounts

2% Cash discounts allowed when payment is made at the time of delivery or pickup.

Several discounts may apply on the same sale. It is possible to use tonnage, early order, and cash discount on the same purchase.

Deduct early season and tonnage discounts before cash discounts.

In figuring fractions of a cent, carry forward 1/2 cent or more, and drop less than 1/2 cent.

EXEMPT SALES — (Schedule A)

These items are exempt only if used exclusively for agricultural purposes, on land owned or leased for the purpose of producing farm products, and used directly in producing farm products or livestock to be sold ultimately at retail.

Artificial insemination equipment
Augers

Bailers
Bale transportation equipment
Binders
Bins, grain, portable
Blowers
Brooders
Bulk milk coolers
Bulk milk tanks

Calf weaners and feeders
Cattle currying and oiling machine
Cattle feeders, portable
Chain saws for commercial use in harvesting timber, lumber, and in orchard pruning
Chicken pluckers, portable
Choppers
Combines
Conveyors, portable
Corn pickers
Crawlers, tractor
Crushers
Cultipackers
Cultivators

De-beakers for productive animals
De-horners for productive animals
Discs
Drags
Dryers
Dusters

Egg handling equipment
Ensilage cutters

Farm tractors
Farm wagons
Farrowing houses, portable, and crates
Feed carts
Feed grinders
Feeders
Fertilizer distributors
Foggers
Forage boxes
Forage harvester
Fruit graters
Fruit harvesters

Grain augers
Grain binders
Grain bins, portable
Grain conveyors
Grain drills
Grain elevators, portable
Grain handling equipment
Grain planters

Harrows (including spring-tooth harrow)
Hay loaders
Head gates
Hog feeders, portable
Hoists, farm
Husking machines
Hydro-coolers

Incubators, portable
Irrigation equipment

Livestock feeding, watering and handling equipment, portable

Manure handling equipment (including front end and rear end loaders and blades)
Manure spreaders
Milk cans
Milk coolers
Milk strainers
Milking equipment (including bulk milk refrigerators, coolers, and tanks)
Milking machine
Mowers, hay and rotary blade

Pickers
Planters
Plows
Poultry feeder, portable
Poultry house equipment
Pruning and picking equipment

Refrigerators used to cool raw milk
Repair and replacement parts for exempt machinery
Rollers
Root vegetable harvesters
Rotary blade mowers
Rotary hoes

Seeders
Seed cleaners
Seed planters
Shellers
Silo unloaders
Sorters
Sowers
Sprayers
Spreaders
Squeeze chutes
Subsoilers

Tanks, bulk milk
Threshing machines
Tires for exempt machinery
Tillers
Tractors, farm

Vacuum coolers
Vegetable graders
Vegetable washers
Vegetable waxers

Wagons, farm
Washers, fruit, vegetable, and egg
Waxers
Weeders

TAXABLE SALES — (Schedule B)

Air compressors
Air tanks
Anti-freeze
Automobiles
Axes

Baler twine
Barn ventilators
Binder twine
Bins, permanently installed
Brooms
Brushes
Building materials and supplies

Cattle feeders, permanently installed
Cement
Chain saws
Cleansing agents and materials
Construction tools
Conveyors, permanently installed
Cow stalls

Ear tags
Electrical wiring
Equipment for fire prevention
Equipment and supplies for home or personal use

Fans
Fence building tools
Fence posts
Field toilets
Fire prevention equipment
Fuel additives

Garden hose
Garden rakes and hoes
Gasoline tanks and pumps
Grain bins, permanently installed
Greases and oils

Hand tools
Hammers
Heaters
Hog rings
Hog ringers
Hose, garden
Hydraulic fluid

Lamps
Lanterns
Lawnmowers
Light bulbs
Lubricating oils and grease

Marking chalk

Nails

Office supplies and equipment

Packing room supplies
Personal property installed in or used in housing for farm workers
Post hole diggers
Pumps, gasoline
Pumps for household or lawn use

Refrigerators for home use
Repair tools
Road maintenance equipment
Road scraper
Roofing

Sanders
Shovels
Silos
Small tools
Snow fence
Snow plows and snow equipment
Stalls
Stanchions
Staples
Supplies for home or personal use

Tanks, air
Tanks, gasoline
Toilets, field
Tools for repair construction
Tractors, garden

Water hose
Welding equipment
Wire, fencing
Wrenches

COMMON MISTAKES ON SALES RECEIPTS

1. Tickets Are Poorly Written
2. Discounts Are Not Shown
3. Calculating Mistakes Are Made
4. Incorrect Names And Addresses
5. Sales Tax Is Not Figured
6. Missing Sales Receipts

PROBLEMS IN FIGURING SALES RECEIPTS

DIRECTIONS: With the following information, please fill in the sample sales ticket. Obtain the local sales tax percentage from your instructor.

Sales tax for all problems is _______ percent.

30 bales of twin at $10.00 per bale. Received $1.00 per bale discount for early order.

Two shovels at $12.50 each.

15 tons of soybean meal at $200.00 per ton. Received a 2 percent quantity discount.

10 tubes of wormer at $12.00 per tube.

One 200-gallon fuel storage tank at $350.00.

1,500 pounds Sow 35 at $14/CWT (bulk).

500 bushels of oats at $1.60 per bushel.

350 bushels of corn ground at $1.75 per bushel.

5 pounds of fly bate for cattle at $1.75 per pound.

1,000 pounds Hog 40 at $12.40/CWT (bulk)

Paid cash.

Use the following discounts:

$2.00 per ton discount (plus $8.00 per ton bulk)

2 percent cash discount

Sample Sales Ticket

00001

AGRIBUSINESS NAME
AND
ADDRESS

TERMS: ______________________ DATE ______________________ 19___

CUSTOMER NAME: ______________________________________

ADDRESS: ______________________________________

Sold by	Cash	Check	C.O.D.	Charge	On Acct.	Mdse. Ret.	Paid Out

Qty	Description	Price	Amount
	Tax		
	TOTAL		

Sales Ticket Number

00001

RECEIVED BY: ______________________________________

Checklist for Sales Slip

1. Correct date
2. Customer's name and address
3. Complete description of article
4. Subtotal of the extension
5. Sales tax on all taxable items
6. Delivery or other charges
7. Grand total of charges for the sale
8. Method of payment
9. Record of amount of check or cash offered in payment and change returned
10. Signature of person receiving merchandise when settlement is other than cash
11. Record of customer paying on account
12. Ticket which is ruined marked void
13. Ticket initialed by salesperson

PROCEDURE OF DELIVERY

1. Clean truck of residues
2. Clean boots to prevent transmission of diseases
3. Be sure sales ticket is complete
4. Be on time
5. Close feeders and gates

Crop Sales and Service

PROBLEM AREA 1

WHAT DOES AN AGRICULTURAL SUPPLY EMPLOYEE NEED TO KNOW ABOUT BUSINESS WAREHOUSE SAFETY AND OPERATIONAL PROBLEMS?

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PROBLEM I: What does an agricultural supply employee need to know about business warehouse safety and operational problems?

INTEREST APPROACH:

Before class begins, pour water colored to look like PARAQUAT on the shop or classroom floor. As class begins, tell the students that this is a chemical spill and what chemical it is. Using INFO-1, have students describe how to clean up the spill and proceed to clean it up.

STUDY QUESTIONS:

1. What should an agricultural supply business manager keep in mind when storing saleable materials?
2. How is chemical poisoning recognized and what first aid treatment should be administered?
3. What procedures should a warehouse employee follow in mixing chemicals?
4. Why are tags on seed bags important and what information is provided on the tag?
5. What safety procedures should an employee observe when operating and maintaining equipment in a farm supply business?
6. How is inventory ordered and received in an agricultural supply business?
7. What inventory procedures must a warehouse employee be able to use?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

For human relations and communicative skills. Student Learning Activity #9.

For experiences to provide information. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Include the use of whole numbers (addition, subtraction, multiplication, division) in solving problems. Student Learning Activity #8.

Improve the students' ability to write clearly. Student Learning Activity #7.

Improve the students' ability to follow oral directions. Student Learning Activity #6.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Determine the accuracy of a statement. Student Learning Activity #2.

Identifying unstated and stated assumptions. Student Learning Activity #3.

STUDENT LEARNING ACTIVITIES:

1. Review and discuss warehouse storage procedures on TM-2. Have students complete ACT-3. Making transparencies of students' work in ACT-3, have them discuss them with the class. Using ACT-4 and INFO-5 and 6, have students classify into groups those chemicals that can be stored together and the temperature range for storage of each chemical.

2. Have students read INFO-7. Invite a physician to speak to the class about problems he or she has observed with chemical poisoning and what a person should do when coming into contact with poison chemicals.

3. Have each student interview five farmers and/or agricultural business warehouse workers to determine (1) what chemicals the farmers use, (2) what safety precautions the farmers follow when using the chemicals, (3) what the farmers do when they come into contact with the chemicals they use, and (4) how they dispose of the containers the chemicals come in. Compile students' findings and discuss them in class. Based on these findings, plan a safety campaign on chemical use and disposal in the community.

4. Have students read INFO-8, Tips on Tank-mixing of Pesticides. Discuss the tips using TM-9. Bring a tank to the laboratory and demonstrate the procedures using substitute, safe materials as chemicals (water, flour, etc.).

5. Review and discuss the contents of a label on a bag of seed (TM-10). Have each student bring to class five different tags from bags of seed (soybeans, corn, alfalfa, etc.). Have them list common types of information printed on each tag. Discuss students' lists in class and relate the importance of the tag information.

6. Bring to class the operating manuals for equipment used in agricultural supply businesses. Have students develop an operational check list for each machine and a list of safety procedures to observe while operating

the machine. Duplicate these lists and give each student a copy for his personal use.

7. Review and discuss the proper use of a receiving record, bill of lading, and invoice using TM-11, 12, and 13. Using ACT-14a, have students complete a purchase order (14b), receiving report and invoice (14c), and bill of lading (14d). Have students write a one-page paper describing the function of each report.

8. Using ACT-15a and 15b, have students fill a fertilizer order for a customer from a customer sales receipt.

9. Arrange a field trip to a local agricultural supply business and have the local dealer explain his inventory system to the students. Have students describe the inventory process shared by the dealer in the form of a list of steps followed by the dealer in maintaining his inventory.

CONCLUSION:

Guidelines for storing saleable materials:

Do not smoke in warehouse and storage areas both inside and outside.

Keep all storage areas neat and orderly at all times.

Stack all material in straight, neat, secure manner in designated bags or piles.

All storage piles should be kept as narrow as possible, consistent with OSHA requirements.

Clean up any and all spillage immediately.

Maintain clearance between the top of the pile and the sprinkler heads on lowest ceiling beam in compliance with OSHA requirements.

Maintain adequate clearance around lights and heating units to avoid ignition of combustible materials.

Recooper or repackage any leaking or damaged containers as soon as possible.

Do not block access to base stations, fire extinguishers, safety showers, eye wash stations, first aid kits, or electrical switches and panels.

For poisoning recognition and appropriate first aid treatment procedures, see INFO-7.

Tips on tank-mixing pesticides:

Read the labels carefully for all products to be mixed. Follow directions.

Do a small scale "jar test" for compatibility.

When tank-mixing in volume, put two-thirds of the carrier in the tank first. Then add pesticides one by one with wettable powders first. Agitate for thorough mixing after each addition. Finish filling the tank with carrier.

Keep agitation going all the way to the field, during application, and during stops for any reason.

With any new combination, test your tank mixture on small areas, at varying rates and conditions of use before large scale use.

Use exact dosage rates for registered tank mixes.

Tags on seed bags contain seed labeling information and information concerning germination.

Seed bags should be stored in ways to prevent (1) vermin and weather contamination, (2) damage in handling and contamination in mistaken identity of seed in handling.

When operating an employee should know:

Some of the types of equipment:

Lift trucks

Delivery trucks

Conveyors

Loading and unloading equipment

Truck scales

Package scales

Legs

Safety practices and operation of equipment to prevent:

Injury to workers.

Damage to product.

Damage to equipment.

Damage to the plant.

Fire and accidents.

Eliminating fire hazards.

Safe practices with delivery trucks.

Safe practices with electrical equipment, switches, fuses, and controls.

Maintenance to reinforce safety and equipment life.

Dust control to avoid dust explosions.

Prohibiting smoking.

Avoiding overheated motors and slipping belts.

Avoiding electrical sparks.

Using safety shields on lamps.

Investigating and studying methods to control "spread of fire" through the building, conveyors, and spouting.

- Housekeeping to avoid accidents and contamination of products.
- Safety checks:
    - Maintaining and periodically checking all safety equipment.
    - Cleanliness of buildings and equipment to avoid fires and explosions.

Reports are necessary for warehouse operation.

- Four different types of reports may be used:
    - Receiving report: used internally by large agribusinesses to check against the purchase ordered.
    - Bill of lading: accompanies the carrier and indicates what the carrier had when it left the point of origin.
    - Invoice: a record from the supplier describing what was shipped and includes the agribusiness's purchase order number.
    - Sales receipt: customer's record of purchase. It is used by the warehouse person to verify a customer's order.

Inventory is:

- The quantity of merchandise (whether raw or finished) in the agribusiness's possession.
- The inventory can include both products and fixtures or machines.
- Physical inventory:
    - Taking an actual count of inventory on hand.
    - Done at regular intervals.

Gives an accurate account of what is on hand.

Needed for tax and insurance purposes.

The main disadvantage is that it takes time and disrupts regular business.

Receiving physical inventory:

Counting the items received and checking against the original purchase order.

Inspecting the condition of the merchandise.

Business loss caused by:

Shoplifting can be minimized by watching customers closely, by restricting them to certain areas, and by displaying items easily stolen in areas out of reach of customers.

Errors result from carelessness; inaccurate counts or weights; and incorrect information causes wrong items and quantities to be ordered.

Not following established procedures can cause confusion and allow for things to be overlooked.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify proper safety procedures for material storage.

Identify safe operation of equipment around a warehouse.

Identify maintenance procedures to maintain overall safety of the agribusiness.

Aid the agribusiness in service to its customers.

Maintain necessary reports for the warehouse.

Maintain inventory.

REFERENCES AND INSTRUCTIONAL MATERIALS:

Individual Student Study Guide for Fertilizer and Chemical Salesman. Benkey, Harold. Agricultural Education Department of Vocational Education, University of Kentucky, Lexington, Kentucky.

Grain, Feed, Seed, and Farm Supply Technology edited by the U.S. Office of Education (U.S. Department of Health, Education, and Welfare, Washington, D.C.)

Student Study Guide on Employee in Grain and Seed Business. Department of Vocational Education, University of Kentucky, Lexington, Kentucky.

The Pesticide Book. Ware, George W. W. H. Freeman and Company, San Francisco, California.

Program Planning Guide in Agricultural Supplies and Services. Welton and Marks. School of Agriculture, Southern Illinois University, Carbondale, Illinois.

Agricultural Business and Management. Iowa Curriculum Assistance Systems, Iowa State University, Ames, Iowa.

1985-1986 Label Manual. Farmland Industries, Inc., Kansas City, Missouri 64116.

Business Procedures and Records. Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators
or persons under their direct supervision and only for those uses covered
by the Certified Applicator's certification.

POISON

POISON

DO NOT POUR FROM ORIGINAL CONTAINER EXCEPT FOR IMMEDIATE USE.

SUPPLEMENTAL PAMPHLET
DIRECTIONS FOR USE.

TO PREVENT ACCIDENTS,
NEVER PUT INTO FOOD, DRINK
OR OTHER CONTAINERS.

ORTHO

PARAQUAT+PLUS

SPECIMEN

POISON

DO NOT USE OR STORE IN OR AROUND THE HOME
KEEP OUT OF REACH OF CHILDREN

READ WORKER SAFETY RULES ON BACK PANEL

Active Ingredient	By Wt.
Paraquat dichloride (1,1'-dimethyl-4,4'-bipyridinium dichloride)	29.1%
Inert Ingredients	70.9%

Contains 2 lbs. Paraquat cation per gallon.

- A Weed and Grass Killer
- Harvest Aid Chemical

DANGER: ONE SWALLOW CAN KILL.
SYMPTOMS ARE PROLONGED AND PAINFUL. ONSET OF SYMPTOMS MAY BE DELAYED FOR UP TO 3 DAYS AFTER SWALLOWING.
May Be Harmful or Fatal If Absorbed Through Skin or Inhaled. Harmful to Skin and Eyes.

PELIGRO — PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED
IMMEDIATELY induce vomiting by inserting finger in throat. Administer fluids and induce further vomiting. Get to a hospital or physician fast. PROMPT TREATMENT IS ESSENTIAL and must be initiated before signs and symptoms of injury appear. **Note to Physicians:** Call the Chevron Poison Information Center (415) 233-3737 at any hour to obtain toxicology and medical management consultation, a supply of bentonite clay, and paraquat analysis. Symptoms following ingestion may be delayed up to 3 days. To be effective, treatment for paraquat poisoning must begin **IMMEDIATELY.** Treatment consists of binding paraquat in the gut with suspensions of bentonite clay or charcoal and removal of paraquat from the blood by prolonged charcoal hemoperfusion or continuous hemodialysis.

SKIN CONTACT
IMMEDIATELY wash with soap and water. Remove and wash all contaminated clothing with soap and hot water before reuse. Prolonged contact will cause severe irritation. Contact with irritated skin, or a cut, or repeated contact with intact skin may result in poisoning.

EYE CONTACT
IMMEDIATELY wash eyes with water for at least 15 minutes and get medical attention. Contact may cause eye injury.

INHALATION
IMMEDIATELY get away from spray mist. Exposure may cause irritation, nose bleeds and may lead to poisoning. Stop and check spray procedure. Follow Worker Safety Rules on back panel.

WASH AND DESTROY CONTAINER WHEN EMPTY. NEVER REUSE.

FARMLAND INDUSTRIES, INC. COOP
KANSAS CITY MISSOURI 64116

DIRECTIONS FOR USE
It is a violation of Federal law and may endanger the applicator or third parties to use this product without complying with all label directions and warnings.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH DANGER STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

READ DANGER AND FIRST AID TREATMENT ON FRONT PANEL AND WORKER SAFETY RULES ON BACK PANEL.

NOTE: Do not use Around Home Gardens, Schools, Recreational Parks or Playgrounds.

Do not combine ORTHO PARAQUAT+PLUS with liquid fertilizer solutions except as specified below. DO NOT combine with suspension type liquid fertilizers as the activity of Paraquat will be reduced.

Use ORTHO X-77 Spreader (non-ionic). ORTHO X-77 Spreader is recommended, but a similar and suitable non-ionic surfactant may be substituted.

Do not use dirty or muddy water for Paraquat dilution as Paraquat will be inactivated.

DIRECTIONS

PREPLANT OR PREEMERGENCE USES

PREPLANT OR PREEMERGENCE USE—For Kill of Emerged Annual Broadleaf Weeds and Grasses and for Top Kill and Suppression of Perennials— Apply when the weeds and grasses are succulent and growth is from 1" to 6" high (larger plants are less affected by this treatment). Note: To prevent injury to germinating crop seedlings, do not apply preplant or preemergence to soils lacking clay minerals, i.e., peat, muck, pure sand, artificial planting media.

ASPARAGUS: Preplant or Preemergence—Apply 1 to 2 qts. per sprayed acre as a band treatment over the row or as a broadcast treatment prior to, during, or after planting, but before emergence of the crop. Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals. spray. Apply 50 to 100 gals. spray per acre. Allow maximum weeds and grass emergence prior to treatment. Seeding or transplanting should be done with a minimum of soil disturbance. Weeds and grasses emerging after treatment will not be controlled. Crop plants emerged at time of application will be injured. Do not apply within 18 months before harvest.

COTTON: Preplant Treatment—Ground Application: Apply 1 to 2 qts. per acre as a single broadcast application in 20 to 60 gals. water. Beds should be preformed to permit maximum weed and grass emergence prior to treatment. Seeding should be done with a minimum amount of soil disturbance. Weeds and grasses emerging after application will not be controlled. Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals. spray.

ALFALFA, CORN, LETTUCE, MELONS, PEPPERS, SORGHUM, SUGAR BEETS, TOMATOES, SAFFLOWER AND SUNFLOWER: Preplant or Preemergence Treatment—Apply 1 to 2 qts. per sprayed acre as a band treatment over the crop row, or as a broadcast treatment, prior to, during or after planting—but before emergence of the crop. **Aerial Application**—5 to 10 gals. water per acre. **Ground Application**—Use 20 to 60 gals. diluted spray. Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals. of diluted spray. Seedbeds should be formed as far ahead of planting and treatment as possible to permit maximum weed and grass emergence. Seeding should be done with a minimum amount of soil disturbance. Weeds and grasses emerging after application will not be controlled. Crop plants emerged at time of application will be killed.

BARLEY, WHEAT: Preplant or Preemergence Treatment—Apply 1 to 4 pts. per sprayed acre as a band treatment over the crop row, or as a broadcast treatment prior to, during or after planting—but before emergence of the crop. **Aerial Application**—5 to 10 gals. water per acre. **Ground Application**—Use 20 to 60 gals. diluted spray. Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals. of diluted spray. Seedbeds should be formed as far ahead of planting and treatment as possible to permit maximum weed and grass emergence. Seeding should be done with a minimum amount of soil disturbance. Weeds and grasses emerging after application will not be controlled. Crop plants emerged at time of application may be killed. Do not graze livestock in treated area.

CORN ONLY: For Kill of Existing Vegetation and Residual Weed Control Where Corn Will Be Planted Directly Into a Cover Crop, Established Sod or in Previous Crop Residues.
Tank-Mix with Atrazine:
Apply 1 to 2 pts. ORTHO PARAQUAT+PLUS plus 2⅓ to 3¾ lbs. Atr 80 Wettable per acre, as a broadcast spray. Refer to Atrazine 80 We label for directions, limitations and cautions. Apply 20 to 60 gals. diluted spray per acre. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals. diluted spray. Add Atrazine to spray tank first, mixing thoroughly in water. Then add Paraquat and surfactant. Constant agitation recommended at all times.

Paraquat plus Atrazine may be applied in liquid nitrogen and/or complete liquid fertilizer solutions when 25 or more gallons of dilute solution are applied per acre in combination with 1 to 2 pts. of ORTHO X-77 Spreader (non-ionic) per 100 gals. Equipment must be adjusted and calibrated to obtain thorough coverage of undesirable vegetation. Inadequate coverage and/or the absence of ORTHO X-77 Spreader (non-ionic) will result in a severe reduction of Paraquat activity. Phosphate containing liquid fertilizer solutions will reduce the activity of Paraquat. When liquid fertilizer solutions containing phosphorus are used with Paraquat, and a rapid kill is desired, use the high Paraquat label rate.

Tank-Mix with AATREX® 80 W and PRINCEP® 80 W:
Apply 1 to 2 pts. ORTHO PARAQUAT+PLUS plus 1¼ to 2⅓ lbs. PRINCEP 80 W plus 1¼ to 2½ lbs. AATREX 80 W per sprayed acre prior to, during or after planting—but before crop emergence. Use the low rates of PRINCEP and AATREX on light soils, and the higher rates on heavy clay soils. Use 20 to 60 gals. of diluted spray per sprayed acre. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals. diluted spray. Add the AATREX to the spray tank while agitating, then add the PRINCEP, Paraquat and ORTHO X-77 Spreader (non-ionic). Continue agitation during application. Refer to the AATREX and PRINCEP labels for specific precautionary statements.
PRINCEP® and AATREX® trademarks of CIBA-GEIGY.

Tank-Mix with BLADEX® 80 W:
Apply 1 to 2 pts. ORTHO PARAQUAT+PLUS plus 1½ to 5 lbs. BLADEX 80 W, depending upon soil type, as a broadcast spray. Apply 20 to 60 gals. diluted spray per acre. Add ORTHO X-77 Spreader (non-ionic) at 1 qt 100 gals. diluted spray. Add BLADEX 80 W to spray tank first, mixing t oughly in water. Then add Paraquat and surfactant. Constant agitation recommended at all times. Do not mix with liquid fertilizer. Refer to BLADEX 80 W label for directions, limitations and cautions.
BLADEX® Shell trademark.

Tank-Mix with LASSO® and Atrazine:
Apply 1 to 2 pts. ORTHO PARAQUAT+PLUS (0.25 to 0.5 lb. active) plus 4 to 5 pts. LASSO (1.5 to 2.5 lbs. active), plus 1.25 to 2.5 lbs. Atrazine 80 Wettable (1.0 to 2.0 lbs. active) per treated acre prior to, during, or after planting, but before crop emergence. Use 20 to 60 gals. of diluted spray per treated acre. Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals. of diluted spray. Add the Atrazine to the spray tank while agitating, then add the LASSO, Paraquat and ORTHO X-77 Spreader (non-ionic). Continue agitation during application. Refer to Atrazine and LASSO labels for cautions and for specific rates for a given soil type.
LASSO® trademark of Monsanto Company.

GRAIN SORGHUM: For Desiccation and Residual Control of Annual Broadleaf Weeds and Grasses Where Sorghum Will Be Planted Directly Into Previous Crop Residues—Apply 1 to 2 pts. ORTHO PARAQUAT+PLUS plus 2 to 3 lbs. Atrazine 80 Wettable per acre as a broadcast ground spray before, during or after planting but before crop emergence. Refer to Atrazine 80 Wettable label for directions, limitations, cautions and for a list of weeds controlled by preemergence activity of Atrazine. Apply 20 to 60 gals. diluted spray per acre. Add ORTHO X-77 Spreader (non-ionic) at 16 to 32 fl. oz. per 100 gals. diluted spray. Water or nitrogen solutions may be used as a carrier. Add Atrazine to spray tank first, mixing thoroughly in carrier. Then add Paraquat and ORTHO X-77 Spreader (non-ionic). Constant agitation recommended at all times. This herbicide tank mixture will not control volunteer sorghum or shattercane which emerges after application.

Tank-Mix with Atrazine and IGRAN®: (This tank-mix should be used instead of Paraquat + ATRAZINE when better preemergence control of barnyardgrass, crabgrass and fall panicum is desired.)
Apply 1 to 2 pts. ORTHO PARAQUAT+PLUS plus 1 to 2 lbs. Atrazine or 1.6 to 3.2 pts. Atrazine 4L plus 2 to 2½ lbs. IGRAN 80 W per acre as a broadcast ground spray before, during or after planting but before crop emergence. Weed control is often superior from application made approximately one week prior to planting. Use low rates of Atrazine and IGRAN on medium soils, and the higher rates on heavy soils. Refer to Atrazine and IGRAN labels for directions, limitations, cautions and for a

list of weeds controlled by preemergence activity of Atrazine and IGRAN. The addition of 2,4-D (ester) at 0.5 lb. active per sprayed acre may aid in the suppression of perennial broadleaf weeds and annual broadleaf weeds that have made excessive growth before application. Refer to the 2,4-D label for directions, limitations and cautions. Apply 20 to 40 gals. diluted ay per acre. Add ORTHO X-77 Spreader (non-ionic) at 16 to 32 fl. oz. per 100 gals. diluted spray. Use only water or nitrogen solutions as a carrier. Add IGRAN to spray tank first, mixing thoroughly in carrier. Then add Atrazine, 2,4-D (if used), Paraquat and ORTHO X-77 Spreader (non-ionic). Constant agitation recommended at all times.
IGRAN* trademark of CIBA-GEIGY.

SOYBEANS: Preplant or Preemergence Treatment—Apply 1 to 4 pts. of Paraquat per sprayed acre as a band treatment over the crop row, or as a broadcast treatment, prior to, during or after planting—but before emergence of the crop. Use the 1.0 pt. rate when spring annual broadleaf weeds and grasses are less than 4 inches high or when a directed spray or cultivation will be used within 3 weeks after planting. **Aerial Application**—5 to 10 gals. spray mix per acre. **Ground Application**—20 to 60 gals. spray mix per acre. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals. of diluted spray. Seeding should be done with a minimum amount of soil disturbance. Weeds and grasses emerging after application will not be controlled. Crop plants emerged at time of application may be killed and yields reduced.

SOYBEANS: Minimum Tillage Systems.
Tank-Mix with LASSO* and LOROX* 50 WP:
Use this tank mixture for control of most emerged annual weeds, suppression of many emerged perennial weeds and preemergence control of many annual weeds when soybeans will be planted directly into a cover crop, stale seed bed, or in previous crop residues such as wheat stubble. This tank mixture will not control regrowth from perennial weeds. Do not apply by air.

For weeds controlled preemergence, see the LASSO or LASSO EC and LOROX 50 WP labels. Refer to the LASSO or LASSO EC and LOROX 50 WP labels for precautionary statements, crop rotation restrictions, rates which are dependent upon soil textures, directions, limitations, and cautions.

Broadcast Treatment—Apply 1 to 2 pts. ORTHO PARAQUAT—**PLUS** in this nk mixture in 20 to 60 gals. water per acre immediately before, during or er planting but before crop emergence. Use the 2 pt. rate if any weeds are 4 to 6 inches tall. This mixture may not control weeds taller than 6 inches. As density of stubble, crop residue or weeds increases, spray gallonage should be increased within the recommended range for complete coverage. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals. of diluted spray. First, add the LOROX 50 WP to the spray tank while agitating, then add the LASSO or LASSO EC, ORTHO PARAQUAT—PLUS and ORTHO X-77 Spreader (non-ionic). Continue agitation during application.
LASSO* trademark of Monsanto Company
LOROX* trademark of DuPont

SOYBEANS (Preemergence Treatment)—For Kill of Emerged Annual Broadleaf Weeds and Grasses and for Top Kill and Suppression of Emerged Perennials Where Soybeans Will Be Planted Directly into a Preformed Bed, Cover Crop, or in Previous Crop Residues.
Tank-Mix with LOROX*:
Apply 1 pt. ORTHO PARAQUAT—PLUS plus 1 to 3 lbs. LOROX* Linuron Weed Killer—50 Wettable on sandy loam, 1¼ to 4 lbs. on silt loam, 1⅓ to 5 lbs. on clay loam soils per sprayed acre as a band treatment over the crop row or as a broadcast treatment after planting—but before emergence of the crop. **Aerial Application**—Apply 5 to 10 gals. spray mix per acre. **Ground Application**—Use 20 to 60 gals. diluted spray. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals. of diluted spray. Seeding should be done with a minimum amount of soil disturbance. Crop plants emerged at time of application will be killed. For band applications, compute amount of Paraquat and LOROX needed per acre by dividing the band width by the inches between crop rows and then multiplying the answer by the recommended broadcast rates. Refer to the LOROX Linuron Weed Killer label for cautions.
This herbicide tank mixture WILL NOT CONTROL Rhizome Johnsongrass.
LOROX* trademark of DuPont.

Tank-Mix with LASSO* and SENCOR*:
For Contact Action on Emerged Weeds and Preemergence Control of martweed, Pigweed and Cocklebur, Foxtail and Crabgrass. (This tank mix ould be used instead of Paraquat + LOROX or Paraquat + SENCOR when better preemergence control of crabgrass and foxtail is desired.)

Apply 1 to 2 pts. ORTHO PARAQUAT—PLUS plus 2 to 2½ qts. LASSO (4 lb / gal. EC) plus ½ to 2 lbs. SENCOR 50 WP per acre as a preemergence broadcast ground spray. Refer to LASSO and SENCOR 50 WP labels for rates which are dependent upon soil textures, directions, limitations and **cautions. Apply in 20 to 60 gals. spray mix per acre. Use the 2 pt. rate of Paraquat if weeds are 4 to 6 inches tall. This mixture will not control weeds taller than six inches. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals. of diluted spray. Add SENCOR 50 WP to the spray tank first and mix thoroughly. Then add LASSO followed by ORTHO PARAQUAT—PLUS** and ORTHO X-77 Spreader (non-ionic). Constant agitation is recommended at all times. Do not use treated vines for feed or forage.
LASSO* trademark of Monsanto Company.
SENCOR* trademark of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.

Tank-Mix with SENCOR*:
For Contact Action on Emerged Weeds and Preemergence Control of Smartweed, Pigweed and Cocklebur. (This tank mix should be used instead of Paraquat + LOROX when infestations of emerged smartweed, pigweed and cocklebur are present at application and when better preemergence control of these species is desired.)

Apply 1 to 2 pts. ORTHO PARAQUAT—PLUS plus ¾ to 2 lbs. SENCOR 50 WP according to SENCOR label recommendations as a broadcast ground spray before, during or after planting but before emergence of the crop. Use the 2 pt. rate of ORTHO PARAQUAT—PLUS if weeds are 4 to 6 inches tall. This mixture will not control weeds taller than six inches. Apply in 20 to 60 gals. spray mix per acre. Add ORTHO X-77 Spreader (non-ionic) at 1 qt. per 100 gals. of diluted spray. Do not use treated vines for feed or forage.

Refer to the SENCOR 50 WP label for cautions, limitations and recommended rates for specific soil textures. In using minimum tillage equipment, it is important to observe the proper planting depth caution stated on the SENCOR label so application is not made directly onto the soybean seed.
SENCOR* trademark of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen

Tank-Mix with SURFLAN* and SENCOR* or with SURFLAN* and LEXONE*: For Contact Action on Emerged Weeds and Preemergence Control of Smartweed, Pigweed, Lambsquarters, Velvetleaf, Common Ragweed, Foxtail and Fall Panicum. (This tank mix should be used instead of Paraquat + LASSO + SENCOR, Paraquat + SENCOR or Paraquat + LOROX when longer residual control of foxtail and fall panicum is desired.)

Apply 1 qt. ORTHO PARAQUAT—PLUS plus 1 to 2 lbs. SURFLAN 75 WP plus ½ to 1 lb. SENCOR 50 WP or LEXONE 50 WP per acre at planting or within 2 days after planting. Refer to SURFLAN and SENCOR or LEXONE labels for rates which are dependent upon soil textures, directions, limitations and cautions. Apply in 20-40 gals. spray mix per acre. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals. of diluted spray. Add SENCOR 50 WP or LEXONE 50 WP to the spray tank first and mix thoroughly. Then add SURFLAN 75 WP followed by ORTHO PARAQUAT—PLUS and ORTHO X-77 Spreader (non-ionic). Constant agitation is recommended at all times. Do not use treated vines for feed or forage.
SURFLAN* trademark of Elanco Products Company
SENCOR* trademark of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.
LEXONE* trademark of E. I. du Pont de Nemours & Co., Inc.

POTATOES (Preplant or Preemergence Treament)—Apply 1 to 2 pts. per acre as a broadcast application in 30 to 100 gals. water by ground application, or in 5 to 10 gals. by air. Add ORTHO X-77 Spreader (non-ionic) at 8 to 16 fl. oz. per 100 gals. of diluted spray. The application should be delayed to provide maximum weed and grass emergence but should be applied not later than ground cracking, before potatoes have emerged. Application made after crop emergence has reduced yields of certain sensitive varieties. Weeds and grasses emerging after application will not be controlled. Postemergence management should be performed as required to control subsequent weed and grass emergence.

FOR KILL OF EMERGED VOLUNTEER BARLEY (California Only)—Preplant in Cotton, Potato, Lettuce, Melon, Safflower, Sugar Beet and Tomato Fields—Apply ½ to 1 pt. per acre broadcast as a preplant treatment to pre-formed seedbeds. **Aerial Application**—Use 5 to 10 gals. water per acre. Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals. diluted spray.

SEEDBED PREPARATION FOR ESTABLISHING GRASSES FOR SEED PRODUCTION: To Control Grasses and Broadleaved Weeds—Prepare the seedbed and allow weed seeds to germinate. When broadleaved weeds and annual grasses are at the 3 to 5 leaf stage apply 1 qt. in 20 to 40 gals. water per acre (larger weeds will be less affected by this treatment). Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals. diluted spray. This treatment can be repeated prior to or on day of seeding. Do not allow animals to graze on treated areas. Do not use seed from treated areas for animal feed. Do not use straw from treated areas for animal bedding or feed.

PASTURE AND RANGE RESEEDING

PASTURE AND RANGE RESEEDING: Suppression of Existing Sod and Undesirable Emerged Broadleaf Weeds and Grasses to Permit Pasture and Range Reseeding—Apply recommended rates in water to make 18 to 75 gals. diluted mix per sprayed acre. Add 8 oz. ORTHO X-77 Spreader (non-ionic) per 100 gals. spray. Apply broadcast or in bands over the drill row prior to, or at time of seeding desired grasses and/or forage legumes. Apply as a band treatment when recovery of the sprayed sod is desired, such as in the case with desirable fescue grass. Apply as a broadcast treatment when existing grass species is undesirable and should be totally suppressed, such as in the case with run-down bluegrass sod.

West of Cascade and Sierra Nevada Mountains—1 to 2 pts. per sprayed acre prior to, or at time of seeding grasses such as Harddinggrass and Palestine Orchardgrass. Apply in October through December after first fall rains and after weeds have emerged and sod has started new growth. For best seeding results, apply on moderate to heavily grazed areas. Do not use in areas with heavy sod and weed growth. Do not pasture treated areas until growth of newly planted seedlings is 3 to 6 inches high.

East of Rocky Mountains—1 to 2 pts. per sprayed acre during the growing season. Use the 2 pts. rate to suppress vigorous and coarse sod species such as Bromegrass. See specific directions for use in the South and Southeast for suppression of Bermudagrass or Bahiagrass sods. Apply prior to, or at time of seeding grasses or forage legumes such as alfalfa, clover and birdsfoot trefoil. Apply only to grazed or mowed pastures which are not more than 2 to 3 inches in height at time of treatment. Do not graze treated areas until the newly planted seedlings have reached their recommended grazing height. Under good seedling emergence and growing conditions, allow a minimum of one month between treatment and first grazing. Seedling grasses, and forage legumes should be at least 6" tall; Sudangrass must be 18" tall and Sorghum-sudan 24" tall at first grazing. Under late fall or winter conditions, it may take 3 to 5 months for seeded grasses and/or legumes to reach recommended grazing height.

South and Southeast—Bermudagrass or Bahiagrass Sods—Late Summer or Early Fall Application for Sod Suppression when Seeding Winter Annuals: Apply 1 pt. per acre in 20 to 30 gals. water in late summer or early fall to sod that does not exceed 3 inches in height. Apply prior to, or at time of seeding winter annuals. Add 1 qt. ORTHO X-77 Spreader (non-ionic) per 100 gals. spray. Do not pasture in treated areas until 60 days after treatment or until winter annual seedlings are 9 inches tall.

BERMUDAGRASS PASTURES: For the Suppression of Emerged Annual Broadleaf and Grassy Weeds including Little Barley, Bromes, Buttercup and Carolina Geranium in Dormant Bermudagrass Pastures—Apply 1 pt. per acre in 20 to 30 gals. water with ground equipment or 3 to 5 gals. water per acre with fixed wing aircraft during March. For control of Little Barley, apply before the mid boot stage. Add 1 qt. ORTHO X-77 Spreader (non-ionic) per 100 gals. spray mix. Do not pasture or mow for hay until 40 days after treatment.

ALFALFA, CLOVER

ALFALFA, CLOVER—Washington, Oregon, Colorado, Idaho, Montana, Utah, Nevada, Wyoming and California (counties of Del Norte, Siskiyou, Modoc, Shasta, Lassen, Plumas, Sierra and Nevada): Apply for Desiccation of Ryegrass, Bluegrass, Cheatgrass, Dogfennel, Chickweed and Tansy Mustard in Dormant Alfalfa and Clover, Except Annual Clover—Apply 2 to 3 pts. per acre (use high rate for cheatgrass) in 20 to 100 gals. spray mix by ground as a broadcast application. Apply by air in 5 to 10 gals. spray mix per acre. Apply to established stands after the last fall cutting when the crop is dormant but before spring growth starts. Do not apply if regrowth following the last fall cutting is more than 2" tall. Alfalfa and clover foliage present at the time of application will be burned. Apply when the broadleaved weeds and grasses are succulent and growth is from 1" to 6" tall. Add ORTHO X-77 Spreader (non-ionic) at 8 to 32 oz./100 gals. spray mix. Do not pasture animals in treated fields before first cutting. Do not graze, cut or harvest within 60 days of application. Do not apply more than once per season.

ALFALFA: For use in states east of the Rockies and north of the southern borders of Colorado, Kansas, Missouri, Kentucky and Virginia—For control of Bluegrass, Chickweed, Henbit and Downy Brome and suppression of perennial grasses including Orchard Grass, Timothy and Smooth Brome. Apply 2 to 3 pts. per acre in 20 to 60 gals. water by ground equipment as broadcast application. Apply by air in 5 to 10 gals. spray mix per acre. U 3 pt. rate for kill or suppression of harder to control weeds and grasses such as the perennial species. Do not apply if fall regrowth following the last fall cutting is more than 6" tall. Apply to well-established stands (at least one year old) after the last fall cutting when the crop is dormant or before spring growth reaches one inch. Alfalfa foliage present at the time of application will be burned which may reduce the yield of the first cutting. Weeds and grasses should be succulent and growing at the time of application. Weeds that germinate after application will not be controlled. Add ORTHO X-77 Spreader (non-ionic) at 8 to 16 fl. oz./100 gals. spray mix. Do not graze, cut or harvest within 60 days of application. Do not apply more than once per season.

Tank-Mix with PRINCEP* 80 W Simazine Weed Killer:
ALFALFA only—For control of Filaree, Jim Hill Mustard and Shepherdspurse, and for improved control of Bluegrass, Cheatgrass, Chickweed and Tansy Mustard. Apply 1 to 3 pts. ORTHO PARAQUAT+PLUS plus 1 to 2 lbs. PRINCEP 80 W in 20 to 100 gals. spray mix per acre with ground equipment or 5 to 10 gals. spray mix per acre by air. Use the 1 pt. rate of Paraquat when weeds and grasses are less than 4" tall. Refer to PRINCEP label for cautions, limitations and recommended rates for specific soil types. Do not pasture animals in treated fields before first cutting. Do not graze, cut or harvest within 90 days of application. Do not apply more than once per season.
PRINCEP* trademark of CIBA-GEIGY

ALFALFA only—Suppression and Control of Broadleaf Weeds and Grasses in New Alfalfa Seedings Grown for Hay (California Only).

	Use Rate Directions—Pints/Acre	
For Control of:	**For Suppression**	**For Control**
Spikeweed (4 in. tall or less)	½ pt.	1 to 2 pts.
Volunteer Small Grain (8 in. tall or less)	½ to 1 pt.	2 pts.
Fiddleneck (6 in. tall or less)	½ to 1 pt.	2 pts.
Shepherdspurse	1 to 2 pts.	—
Annual Bluegrass	—	1 to 2 pts.
Chickweed	—	1 to 2 pts.
Red Maids (6 in. tall or less)	—	1 to 2 pts.

Apply in 25 to 50 gals. water per acre by ground or in 5 to 10 gals. by air as a broadcast application during late winter or early spring. Add ORTHO X-77 Spreader (non-ionic) at 16 oz./100 gals. spray mix. Do not use the ½ pt. rate unless the alfalfa has at least 3 trifoliate leaves, the 1 pt. rate unless the alfalfa has 6 trifoliate leaves; or rates over 1 pt. unless there are 9 trifoliate leaves. Alfalfa foliage present at time of application will be burned. Do not pasture animals in treated fields before first cutting. Do not graze, cut or harvest within 70 days of application. Do not apply more than once during the first growing season. **CAUTION:** SEEDLING ALFALFA STANDS WILL BE REDUCED AND REPLANTING MAY BE NECESSARY. NOT RECOMMENDED IN SEEDLING ALFALFA GROWN FOR SEED.

HARVEST-AID USES

COTTON HARVEST AID

TO AID IN OPENING OF MATURE BOLLS AND TO DESICCATE GREEN LEAVES: ½ pt. in combination with 1 pt. of phosphate or 1 gal. of chlorate defoliant per acre. Apply when 80% or more of the bolls are open and the remaining bolls to be harvested are mature. Development of immature bolls will be inhibited.

TO AID IN DEFOLIATION AND OPENING OF MATURE BOLLS OF WESTERN COTTON (ARIZONA, CALIFORNIA): First Application—⅓ to ½ pt. Paraquat plus 1 to 2 pts. phosphate defoliant or 1 to 2 gals. chlorate defoliant per acre. Use higher dosages on rank cotton. (Caution—Do not use more than ½ pt. Paraquat in initial application, as excessive desiccation may occur.) Apply when 60% or more of the bolls are open and remaining bolls to be harvested are mature. Development of immature bolls will be inhibited. Do not use more than 4.0 lbs. actual sodium chlorate per acre or more than 1.5 lbs. actual phosphate type defoliants per acre.

Second Application — To aid in Opening of Mature Bolls at Second or Later Harvest Aid Treatment and to Desiccate Green Leaves — ½ to 1 pt. Paraquat per acre (in desert cotton areas or on rank vigorous cotton, use the 1 pt. rate only) or ½ to 1 pt. Paraquat plus 1½ to 2 pts. phosphate defoliant or 1½ to 2 gals. chlorate defoliant. Apply when 75% or more of the bolls are open and the remaining bolls to be harvested are mature. Development of immature bolls will be inhibited.

TO DESICCATE STRIPPER COTTON: 1 to 2 pts. per acre. When foliage is dense, use 2 applications of 1 pt. if necessary. Apply when 85% or more of the bolls are open and the remaining bolls to be harvested are mature. Development of immature bolls will be inhibited.

AERIAL APPLICATION — Apply 3 to 10 gals. spray mix per acre. Use ORTHO X-77 Spreader (non-ionic) at 1 pt. per 100 gals. spray mix. Do not apply during periods of thermal inversion to avoid drift.

GROUND APPLICATION — Apply 10 to 30 gals. spray mix per acre. Arrange nozzles to provide thorough coverage of the foliage. Use ORTHO X-77 Spreader (non-ionic) at 1 pt. per 100 gals. spray mix.

May apply as split application. Do not pasture lactating dairy animals. Do not pasture livestock in treated fields within 15 days after treatment. Remove livestock from treated area 30 days before slaughter. Do not feed gin trash to livestock. Do not apply to cotton within 3 days before harvest. Repeat application if necessary. Do not make more than 2 applications or exceed a total of 2 pts. per acre. When combined with phosphate defoliants, observe livestock cautions listed on the phosphate label. When combined with chlorate defoliants, do not pasture livestock on treated areas or feed treated foliage or gin trash. Do not apply within 7 days when used with phosphate or chlorate defoliant.

GUAR — For Use as a Preharvest Crop Desiccant — Apply 1 qt. in 20 to 30 gals. of water per acre. Add ORTHO X-77 Spreader (non-ionic) at 1 to 2 qts. per 100 gals. water. Apply after pods are fully matured. Do not harvest until at least 4 days after application. Do not graze treated areas or feed treated forage to livestock.

POTATO VINES: PREHARVEST VINE KILLING — 1 to 2 pts. per acre. Use the 2 pt. rate where vine growth is vigorous or where quick vine kill is desired or 2 applications of 1 pt. when vine growth is dense. Use the 1 pt. rate on maturing vines. Apply in 50 to 100 gals. water per acre with thorough coverage. Add 8 oz. of ORTHO X-77 Spreader (non-ionic) per 100 gals. water. Do not make more than 2 applications with a minimum of 5 days between applications. Do not apply Paraquat to potatoes within 3 days before harvest. Do not pasture livestock in treated potato fields. To avoid injury to subsequent crops, do not use on muck or peat soils. Do not use Paraquat for desiccating potato vines when the potatoes are to be stored or used for seed as this use may result in tuber decomposition and failure of seed pieces to germinate and grow normally.

SOYBEAN HARVEST AID — Apply ½ to 1 pt. per acre on Broadleaf Weeds and Grasses. Use high rate on Cocklebur. Add 1 qt. ORTHO X-77 Spreader (non-ionic) per 100 gals. spray. **Aerial Application** — 2 to 5 gals. spray per acre. **Ground Application** — 20 to 40 gals. spray per acre. **Indeterminate Varieties:** Apply when at least 65% of the seed pods have reached a mature brown color or when seed moisture is 30% or less. **Determinate Varieties:** Apply when soybean plants are mature, i.e., beans are fully developed, at least ½ of leaves have dropped, and leaves left on plants are turning yellow. Immature soybeans will be injured. Mature cockleburs, especially drought-stressed plants, are tolerant to Paraquat and desiccation will not be complete. Do not pasture livestock within 15 days of treatment. Remove livestock from treated fields at least 30 days before slaughter.

SUNFLOWER (OILSEED VARIETIES ONLY) — For Desiccation of Sunflower Plants and Broadleaf Weeds and Grasses to Facilitate Harvesting: Apply 1 to 2 pts. ORTHO PARAQUAT+PLUS per acre in 5 gals. spray mix by air or in 20 to 40 gals. by ground application equipment. Use the higher rate when crop stands or weed infestations are heavy. Apply when the sunflower seeds reach physiological maturity (when seed moisture is 35 percent or lower). For many varieties, this corresponds to the time when the back of the heads are yellow and the bracts are turning brown. Harvest 7 to 21 days after application. Add ORTHO X-77 Spreader (non-ionic) at 1 qt. per 100 gals. water. Do not graze treated areas or feed treated forage to livestock.

SUGARCANE — Preharvest Crop Desiccation (Florida and Texas Only) — Apply ½ to 1 pt. per acre. Apply to mature plant or stubble cane using 4 to 10 gals. water per acre. Use higher rate under cool, cloudy weather conditions. ORTHO X-77 Spreader (non-ionic) should be added to all sprays at the rate of 1 pt. per 100 gals. water. Apply with aircraft sprayer 3 to 14 days before burning and harvest. For rapid results, apply when weather is clear and warm. Apply as a coarse spray at low pressure when air is calm to prevent spray drift.

DIRECTED SPRAYS

ORCHARDS, VINEYARDS, WINDBREAK, SHADE AND ORNAMENTAL TREES: For kill of annual broadleaf weeds and grasses and for top kill and suppression of perennials and green suckers under Filbert trees, in the interspaces and around the base of trees and vines — Almonds, Apples, Apricots, Avocados, Bananas, Cherries, Citrus, Coffee, Figs, Filberts, Grapes, Macadamia Nuts, Nectarines, Olives, Papayas, Peaches, Pears, Pecans, Plums, Prunes, Walnuts and other Trees such as Arborvitae, Ash, Elm, Fir, Oak and Pine — Apply as a directed spray at 1 to 2 qts. per sprayed acre in 30 to 150 gals. water (use 30 to 50 gals. water for pecans) to thoroughly cover the weeds and grasses. Add ORTHO X-77 Spreader (non-ionic) at 8 to 32 oz. per 100 gals. Apply when the weeds and grasses are succulent and the new growth is from 1 to 6 inches high. For mature woody weeds, green suckers, late germinating weeds and grasses, and for perennials — retreatment or spot treatment may be necessary. **CAUTION:** Do not allow spray to contact green stems, fruit or foliage as injury may result. Do not spray under windy conditions and use a shield for young trees or vines. Do not allow animals to graze on treated areas. Do not apply when nuts to be harvested are on the ground.

ALMONDS, GRAPES AND WALNUTS (California Only); ORANGES (California and Florida Only); SOUR CHERRIES (Michigan Only); APPLES, PEACHES, PEARS: Tank-Mix With PRINCEP® 80 W Simazine Weed Killer — For Top Kill and Residual Control of Annual Broadleaf Weeds and Grasses and for Suppression of Perennial Weeds — For broadcast application apply 1 to 2 qts. ORTHO PARAQUAT+PLUS per acre and PRINCEP 80 W at the following rates per acre:

Crop	Rate PRINCEP 80 W Per Sprayed Acre	Precautions
Almonds and Peaches (California Only)	1¼-2½ lbs. in 2-4 ft. band on each side of tree row. 1¼ lbs. provides residual control of burclover, common chickweed, wild mustard and shepherdspurse	Do not treat trees established less than 3 years. Do not treat Mission variety of almonds. Do not apply to almond trees propagated on plum root stalks. Do not replant almonds or peaches in treated soil. Do not apply on gravelly sand or loamy sand soil or on soil with less then 1 organic matter. Do not treat areas where water will accumulate.
Apples Pears Sour Cherries (Michigan Only) Walnuts (California Only)	2½-5 lbs.	Do not apply to sandy soil. Leveling and furrowing operations after application will lessen effectiveness of weed control.
Peaches (Arkansas, Louisiana, Missouri, Oklahoma, Texas and states East of the Mississippi River)	2-5 lbs.	Do not apply to sandy or gravelly soil.
Grapes (California Only)	2½-6 lbs.	Do not use in vineyards established less than 3 years.
Oranges (California Only) Except Imperial, Coachella and Palo Verde Valleys	2½-5 lbs.	Do not use in nurseries. To avoid possible injury do not apply to trees under stress from freeze damage for one year following the freeze.
(Florida Only) Bedded	4 lbs.	

Use the low rate of PRINCEP 80 W on coarse textured soils and low organic matter soils. Use the high rate on fine textured soils and high organic matter soils. Apply as a tank mix in 50 to 200 gals. of water per acre to the orchard floor avoiding contact with fruit, foliage or stems. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals. diluted spray. Apply when weeds and grasses are succulent and the new growth is from 1 to 6 inches tall.

For band applications or spot applications around trees, reduce the broadcast rate and the amount of water in proportion to the area actually sprayed.

Make only one application per year. Apply in orchards where trees have been established one year or more. Do not spray under windy conditions and use a shield for young trees. Do not apply to almonds and walnuts when nuts are on the ground during the harvest period Do not allow animals to graze treated areas

Refer to the PRINCEP 80 W Simazine label for general information, caution and warning statements
PRINCEP* trademark of CIBA-GEIGY for simazine herbicide

HOPS (Washington, Oregon and Idaho Only): For Kill of Annual Bluegrass, Ryegrass, Barnyardgrass, Pigweed and Chickweed — Apply as a directed spray in the interspaces and around the base of hop plantings using 1 qt in 20 to 100 gals water per acre to thoroughly cover weeds and grasses Add ORTHO X-77 Spreader (non-ionic) at 8 fl oz per 100 gals spray mix Do not apply around hop vines less than 10 ft tall Apply when weeds and grasses are succulent and growth is from 1 to 6 inches tall Retreatment or spot treatment may be necessary **For Suckering and Stripping (Cascade, Yakima Cluster and Bullion Varieties Only)**: Spray only basal 2 ft of vines using 1 qt in 20 to 100 gals water per acre Add ORTHO X-77 Spreader (non-ionic) at 8 fl oz per 100 gals spray mix Do not apply to hop vines less than 10 ft tall Repeat as necessary **CAUTION**: Do not apply more than 3 times per season Do not apply within 14 days of harvest Do not allow spray to contact green stems, foliage, flowers or cones, as injury may result Do not allow animals to graze in treated hopyards Hop vine refuse and silage may be fed to livestock

GUAVA — Apply as directed spray at 2 qts per sprayed acre in 50 to 200 gals to thoroughly cover the weeds and grasses Add ORTHO X-77 Spreader (non-ionic) at 8 oz per 100 gals Apply when the weeds and grasses are succulent and the new growth is from 1 to 6 inches high For mature woody weeds, late germinating weeds and grasses and for perennials — retreatment or spot treatment may be necessary **CAUTION**: Do not allow spray to contact green stems, fruit or foliage as injury may result Do not spray under windy conditions and use a shield for young trees Do not allow animals to graze on treated areas

PASSION FRUIT — Apply as a directed spray at 2 qts per sprayed acre in 50 to 200 gals to thoroughly cover the weeds and grasses Add ORTHO X-77 Spreader (non-ionic) at 8 oz per 100 gals Apply when the weeds and grasses are succulent and the new growth is from 1 to 6 inches high For mature woody weeds, late germinating weeds and grasses and for perennials — retreatment or spot treatment may be necessary **CAUTION:** Do not allow spray to contact green stems, fruit or foliage as injury may result Do not spray under windy conditions and use a shield for young vines If bark is still green, wrap vine prior to application to prevent injury If application is to be made during harvesting season, apply Paraquat only after picking fruits off the ground Do not allow animals to graze on treated areas

PINEAPPLES: For Kill of Annual Broadleaf Weeds and Grasses and Top Kill and Suppression of Perennials — Apply as a directed spray using 1 to 2 qts in 100 to 200 gals water per sprayed acre to thoroughly cover the weeds and grasses Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals Apply when weeds and grasses are succulent and new growth is from 1 to 6 inches high Retreatment may be necessary on more mature weeds Do not apply within 20 days of harvest.

SMALL FRUITS (Blackberries, Boysenberries, Raspberries, Blueberries) — For Kill of Annual Broadleaf Weeds and Grasses and for Top Kill and Suppression of Perennial Weeds in the Interspaces and Around the Base of Bushes — Apply as a coarse directed spray at 1 to 2 qts per sprayed acre in 50 to 200 gals. water to thoroughly wet the weeds and grasses Add ORTHO X-77 Spreader (non-ionic) at 8 oz. per 100 gals water Apply before emergence of new canes or shoots as injury to those canes or shoots can result. Apply as a coarse spray to avoid drift injury from fine spray mist.

GRAIN SORGHUM: Postemergence Directed Spray — For Kill of Emerged Crabgrass and Pigweed 3 Inches or Less in Height — 1 to 2 pts. ORTHO PARAQUAT+PLUS in 20 to 40 gals. water per sprayed acre. Use higher gallonage of water for larger weeds. For band applications, 1 pt. ORTHO PARAQUAT+PLUS will cover 2 land or crop acres when a 20 inch band is treated in 40 inch rows. Treat when grain sorghum is naturally standing 12 inches tall or more. Add ORTHO X-77 Spreader (non-ionic) at 1 qt. per 100 gals. of spray. Do not exceed 30 psi; high pressure contributes to spray drift.

For best results, apply ORTHO PARAQUAT+PLUS at 1 pt per sprayed acre to grass and weeds less than 2 inches tall. Grass and weeds 2 to 3 inches tall should be sprayed with 2 pts. ORTHO PARAQUAT+PLUS per sprayed acre. Use precision application equipment with spray nozzles mounted on skid shoes, oiling shoes, fenders or cultivators with gauge wheels and adjusted so that only the lower 3 inches or less of the sorghum stalk is sprayed.

For best coverage on single rows, use 4 flat fan nozzles per row, 2 nozzles on each side of the row The 2 forward nozzles should point forward and downward and rear nozzles should point to the rear and downward For double row sorghum use one skid between the two rows with one nozzle spraying backward and downward

Some sheath and lower leaf spotting and desiccation will occur If spotting does not penetrate beneath and outer sheath Degree of injury is related to precision of application and wind velocity Do not spray under windy conditions

FIELD CORN: Postemergence Directed Spray using ORTHO PARAQUAT+PLUS Alone or ORTHO PARAQUAT+PLUS + Atrazine Tank-Mix — For Control of Emerged Annual Broadleaf Weeds and Annual Grasses less than 4 inches tall — Apply 1 pt. ORTHO PARAQUAT+PLUS per acre in 20 to 40 gals of spray mix Apply when corn plants are at least 10 inches tall Corn plants shorter than 10 inches may be injured and not recover Corn height measured from soil surface to top of whorl Apply with directed spray application equipment Arrange nozzles to spray no higher than the lower three inches of corn stalks to provide for maximum contact of weeds with minimum contact of corn plants to prevent excessive sheath and lower leaf spotting and desiccation Add 1 qt ORTHO X-77 Spreader (non-ionic) per 100 gals of spray Do not mix with liquid fertilizer. **For Improved Control of Weeds, Especially Broadleaves, Tank-Mix Paraquat and AATREX*:** Add ⅝ to 1¼ lb AATREX 80W or 1 to 2 pts. AATREX 4L in combination with 1 pt ORTHO PARAQUAT+PLUS per acre. Add AATREX 80W or AATREX 4L to spray tank first, mixing thoroughly in water. Then add Paraquat and surfactant Constant agitation recommended at all times. Refer to AATREX labels for limitation and cautions.

Do not graze treated areas or feed treated forage to livestock
AATREX* trademark of CIBA-GEIGY.

CORN: For use in the USDA Witchweed eradication program to kill grassy weeds Apply 1 qt ORTHO PARAQUAT+PLUS in 10 to 20 gals spray per acre. Add 1 lb VISTIC* per 100 gals water Apply as a spray directed onto the grassy weeds at the base of the corn stalks in the hills or row Initiate sprays in early July and repeat in early August if regrowth of grassy weeds occurs. Do not graze livestock in treated area
VISTIC* Registered Trademark of Hercules, Inc

SOYBEANS: Postemergence Directed Spray — For control of seed Johnsongrass, Crabgrass, Goosegrass, Brachiaria, Echinochloa spp (Texas Millet) and pigweed less than 2 inches tall apply ORTHO PARAQUAT+PLUS at 4 fl oz (.063 lb active) per acre Use proportionately less for band treatment for example on 40 inch rows and 16 inch band apply 1 gal. ORTHO PARAQUAT+PLUS to 80 acres

For 2 to 4 inch grass and 2 to 3 inch pigweed apply ORTHO PARAQUAT+PLUS at 8 fl oz (.125 lb active) per acre for example on 40 inch rows and 16 inch band apply 1 gal ORTHO PARAQUAT+PLUS to 40 acres Soybeans should be 8 inches tall at first application If needed, make second application 7 to 14 days later Do not treat more than twice

Apply 20 gals spray mix per treated acre Use proportionately less for band treatments ... for example 8 gals spray mix per 16 inch band on 40 inch rows

For best coverage, use 4 flat fan nozzles per row, 2 nozzles on each side of row The two forward nozzles should point forward and downward and rear nozzles should point to the rear and downward Do not exceed 30 psi; high pressure contributes to drift Adjust nozzles to spray no higher than the lower three inches of the soybean plant. Do not treat if soybeans are below 8 inches tall; soybeans treated topically will be killed. Add ORTHO X-77 Spreader (non-ionic) at 1 to 2 qts per 100 gals. of spray.

Do not graze treated areas or feed treated forage to livestock.

SUGARCANE — Directed Spray: For Kill of Emerged Annual Broadleaf Weeds and Grasses and for Top Kill of Perennials — Apply as a shielded or directed spray when weeds are 2 to 6 inches high. Avoid contact with cane foliage to prevent serious leaf burn and reduced yields. Make a second and final application, if necessary, when new weed growth is 2 to 6 inches high. Add ORTHO X-77 Spreader (non-ionic) at 8 fl. oz. per 100 gals spray mix.

Florida Only — Apply 1 qt. in 50 to 100 gals. of water per acre For optimum results, apply early in the season (March-April) when weeds are small Do not apply after June 1st as cane growth may be stunted and yields reduc

Hawaii Only — Apply 1 qt in 20 to 200 gals of water per acre. Do not apply after cane rows have closed in

Louisiana Only — Apply ½ to 1 qt. in 20 to 200 gals. of water per acre. For tiller control, apply when tillers are less than 18" high. Use the higher rate

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of Paraquat with heavier weed infestations or tiller growth Do not apply within 30 days of harvest.

TOMATOES AND PEPPERS (Middle Atlantic, Southeast, South Central Regions and Southwest to the Western Boundary of Texas): Postemergence jected Spray — For Kill of Emerged Annual Broadleaf Weeds and Grasses d for Top Kill and Suppression of Emerged Perennial Weeds between Plastic Mulch Covered Rows after Crop Plant Emergence or Establishment — Apply as directed spray using 1 qt per sprayed acre in 20 to 100 gals spray mix Apply with conventional ground equipment directing spray between the rows and using shields to prevent spray contact with crop plants Add ORTHO X-77 Spreader (non-ionic) at 8 fl oz per 100 gals spray mix Apply when weeds and grasses are succulent and weed growth is 1 to 6 inches high Weeds and grasses emerging after application will not be controlled Do not allow spray to contact tomato or pepper plants as injury or excessive residues may result Do not apply more than 3 applications per crop season Do not allow animals to graze on treated areas

DORMANT USE

RHUBARB: For Kill of Emerged Annual Broadleaved Weeds and Grasses and for Top Kill and Suppression of Emerged Perennial Weeds in Dormant Rhubarb — Apply 1 to 2 qts per sprayed acre by ground application equipment. Use 50 to 150 gals spray mix per acre Add ORTHO X-77 Spreader (non-ionic) at 8 oz per 100 gals spray mix Use the higher rate with heavier weed infestations Apply during the dormant season before buds in crown begin to grow Do not make more than two applications per season

NONCROP USES

NONCROP AREAS (Public Airports, Electric Transformer Stations and Substations, Pipeline Pumping Stations, Around Commercial Buildings, Storage Yards and Other Installations, Fence Lines, and Similar Noncrop reas) — For the Control of Annual Broadleaved Weeds and Grasses (such Burclover, Chickweed, Filaree, Groundsel, Nettle, Pigweed, Plantain, uncturevine, Purslane, Red Clover, Shepherdspurse, Thistle, Wild Mustard, Wild Radish, Wild Oats, Blue Grass, Cheat Grass, Crabgrass) and Top Kill and Suppression of Perennial Weeds (such as Bermudagrass, Johnsongrass, and Morningglory) — 1 qt per acre Apply for full coverage and thorough weed contact (50 to 100 gals diluted spray per acre) Best results are obtained when applications are made to young, succulent weeds and grasses Mature, woody weeds are less susceptible Repeat as needed Add ORTHO X-77 Spreader (non-ionic) at 8 oz per 100 gals Paraquat is compatible with many residual herbicides Avoid spray contact with foliage or fruit of food crops and ornamentals

RESIN SOAKING

RESIN SOAKING IN PINES (Loblolly, Shortleaf, Longleaf, Slash, Virginia, Pond, Pitch and Spruce Pines):

Tree Selection — Select trees to be treated from stands on sites not subject to periods of extreme drouth stress as the desiccating effect of paraquat to pines is accentuated during such periods, causing a reduction in the amount of oleoresin deposited in the xylem Select trees to be treated from vigorous, non-stagnated stands, either natural or planted In stagnated stands or commercial timber stands, plan treating with paraquat not sooner than three years after a commercial thinning

Application Directions — Apply ORTHO PARAQUAT — PLUS diluted in water (0 2% to 5% cation wt /wt basis, depending on the type of treatment method) to a suitable wound in the tree trunk to bring the treatment into contact with the xylem (sapwood) One of the following methods may be used:

ark Streaks or Cuts: This type of wound is made using a standard or ro ry bark hack or a chainsaw chipping tool employed in naval stores work to remove a single one-inch wide streak of bark about 1 to 2 feet from ground level The total length should not exceed ⅓ of the tree circumference Multiple streaks or cuts can result in serious girdling of the trunk and premature death of the tree A coarse spray (about 2 to 6 ml) of paraquat solution (1% to 5% cation, wt /wt basis) should be applied to runoff to the exposed xylem, using a plastic acid bottle or a low-pressure sprayer Wear rubber gloves when using the acid bottle The amount of spray required per cut depends on tree circumference and the length of cut or streak (⅓ of circumference) For a 9-inch diameter tree, 3 ml of spray will cover the 1 inch wide streak Using 3 ml of a 2% or 4% paraquat solution will result in application of 60 or 120 mg paraquat per streak

Tree Injection: Pressure injections of 1% to 4% paraquat solution (cation, wt /wt basis) should be applied beneath the bark and just beneath the cambium layer Injections should be made 1 to 2 inches apart around ⅓ of the tree circumference or no closer than 3 inches apart all around the tree From 0 2 ml to 0 4 ml of paraquat solution is applied per injection Using 2% to 4% paraquat solution, this results in 36 to 144 mg paraquat applied per 9-inch diameter tree, for holes spaced 1 inch apart around ⅓ of the tree or 3 inches apart all around the tree

Bore Holes: ⅜ to ⅝ inch diameter holes 2 to 6 inches deep depending on tree diameter, are bored sloping slightly downward and tangentially inward rather than directly towards the center of the tree Solutions of 0 3% to 5% paraquat can be used Lower concentrations (0 3%) are usually applied at higher volumes of 15 to 35 ml per tree, resulting in application of 45 to approximately 100 mg paraquat per tree Using 2% to 4% solutions and applying 5 ml per single hole per tree results in application of 100 or 200 mg paraquat per tree Bore hole applications in the range of 45 to 100 mg paraquat per tree have resulted in effective oleoresin induction

Time of Treatment: Resin soaking can occur from treatments made any time of the year, however, cool season treatments under non-drouth conditions usually result in less severe pine beetle infestations and longer tree life

Interval Between Treatment and Tree Harvest: The interval between application of paraquat and tree harvest should be a minimum of six months and preferably from 12 to 24 months Intervals of over six months may not be possible under conditions of drouth or serious pine beetle attacks, which may make early harvest necessary The paraquat treatment may encourage beetle attack, or may cause premature death of the tree Desiccation of the xylem tissue, rather than the desired resin soaking, may occur, and is more likely at higher dosage rates

Effect on Stem Growth:
Paraquat treatment can result in reduced stem growth during the interval between treatment and tree harvest

Dilution Table for ORTHO PARAQUAT — PLUS (2 lbs. cation per gallon)

Concentration of Cation Desired (Wt./Wt. Basis)	To 1 Gal. of ORTHO PARAQUAT — PLUS, add the following No. Gals. of Water:
0 2%	118 8
0 5%	46 8
1 0%	22 9
2 0%	10 9
3 0%	6 9
4 0%	4 9
5 0%	3 7

WORKER SAFETY RULES/ REENTRY STATEMENTS

USE STRICTLY IN ACCORDANCE WITH DANGER STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

DO NOT get on skin, eyes or clothing

DO NOT inhale spray mist

WASH SPLASHES from skin and eyes immediately

REMOVE and wash contaminated clothing

WASH before eating, smoking and drinking

WEAR full face shield, rubber gloves and apron and waterproof footwear when handling or mixing concentrate

WEAR waterproof footwear and clothing when spraying or when contacting vegetation wet with spray

DO NOT enter treated areas without protective clothing until sprays have dried

AVOID working in spray mist. If there is risk of exposure wear goggles and approved face mask capable of filtering spray droplets

KEEP all unprotected persons out of operating areas or vicinity where there may be danger of drift

Certain states may require more restrictive reentry intervals; consult your State Department of Agriculture for further information

Written or oral warnings regarding use of protective clothing and accidental exposure must be given to workers who are expected to be in treated areas or in areas about to be treated

IMPORTANT: The effect of swallowing Paraquat is far more severe than that which usually results from skin contact or inhalation of spray mist. No opportunity for mist or product to cause serious injury or death should arise when used in strict compliance with these rules but the opportunity may arise in case of gross violations so strictly follow all these rules **as if your life depends on it.**

ENVIRONMENTAL SAFETY CAUTIONS

WILDLIFE

This product is toxic to wildlife. Birds and other wildlife in treated areas may be killed. Do not apply directly to water.

DRIFT

ORTHO PARAQUAT+ PLUS is a contact herbicide that kills all green plant tissue. Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption. Do not apply when weather conditions favor drift from areas treated. For aerial applicators use, do not apply during periods of thermal inversion to avoid drift.

CHEMICAL HAZARD

This product reacts with aluminum to produce hydrogen gas which may form a highly combustible gas mixture. Such gas could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source. Do not mix or store in containers, spray tanks, nurse tanks or such systems made of aluminum or having aluminum fittings. After dilution with water to spray concentrations, spray systems made of, or containing aluminum parts, may be used but should not be used for extended (overnight) storage.

EQUIPMENT/CONTAINERS

Flush all spray equipment with water after use each day. ORTHO PARAQUAT+PLUS is corrosive to aluminum. Aluminum spray equipment and aluminum aircraft structures that are exposed to spray solution or spray drift should be flushed thoroughly with water immediately after use.

STORAGE AND DISPOSAL

PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited.

STORAGE

Store at temperatures above 32 F. Do not contaminate feed, foodstuffs or drinking water. Do not store next to feed or food, or transport in or on vehicles containing foodstuffs or feeds.

PESTICIDE DISPOSAL

This product is acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

See Container Label For Container Disposal Directions

CONDITIONS OF SALE: 1. Chevron Chemical Company (Chevron) warrants that this material conforms to the chemical description on the label and is reasonably fit for use as directed hereon. Chevron neither makes, nor authorizes any agent or representative to make, any other warranty of FITNESS or of MERCHANTABILITY, guarantee or representation, express or implied, concerning this material.

2. Critical and unforeseeable factors beyond Chevron's control prevent it from eliminating all risks in connection with the use of chemicals. Such risks include, but are not limited to, damage to plants and crops to which the material is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the uses stated hereon and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Chevron under 1 above) resulting from handling, storage and use of this material.

Chevron Chemical Company

Ortho Agricultural Chemicals Division
San Francisco CA 94120-7144 Richmond CA 94804-0036
Form 10189-F Product 1000-22 EPA Reg. No. 239-2186-ZA

COOP FARMLAND INDUSTRIES, INC.

When Storing Agricultural Chemicals

* Prohibit smoking in storage area

* Keep Storage area neat and clean

* Stack materials in straight, seave bays or piles

* Keep storage piles narrow

* Clean up spillage immediately

* Allow clearance between the top of the pile and the ceiling ad sprinkler system

* Allow clearance around lights and heating units

* Recooper or repackage leaking or damaged containers

* Keep hose stations, fire extinguishers, safety showers, first-aid kits and electrical switches open

STORING AGRICULTURAL CHEMICALS

Mr. Brown is a warehouse manager of the ACME Agricultural Supply Store. The store handles a complete line of agricultural supplies including seed, livestock feed, and agricultural chemicals.

A shipment of Atrazine 80W and Counter has just come to the store. Layout a plan for storing the agricultural products sold by the store and indicate where he should store the Atrazine and Counter in the diagram below.

COOP

atrazine 80w

80% Wettable Powder Herbicide

SPECIMEN

For Season-Long Weed Control in Corn and Sorghum

For weed control in certain other listed crops; in noncrop areas; and industrial sites.

ACTIVE INGREDIENTS:	
ATRAZINE (2-chloro-4-ethylamino-6-isopropylamino-s-triazine)	78.35%
Related Compounds	1.65%
INERT INGREDIENTS	20.00%
TOTAL	100.00%

Keep out of reach of children.

CAUTION

See additional precautionary statements and directions for use on bag.

FOR PROFESSIONAL OR AGRICULTURAL USE ONLY

NET WEIGHT 5 POUNDS

MANUFACTURED BY

FARMLAND INDUSTRIES, INC.

KANSAS CITY, MISSOURI 64116

STOP
READ ALL DIRECTIONS FOR USE AND PRECAUTIONS BEFORE USING.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Avoid contact with eyes, contact with skin, inhalation of dust and contamination of food and feed.

Environmental Hazards

Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes.

INSTRUCTIONS FOR SAFE HANDLING:

Avoid application directly to animals or humans. Although it is unnecessary for flagmen or loaders to wear protective clothing or equipment, care should be taken to avoid inhalation of dust or spray mist, or contact with skin.

Flagmen and loaders should wash thoroughly before eating and at the end of each day's operation.

DIRECTIONS FOR USE

It is a violation of FEDERAL LAW to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

Storage

Do not contaminate water, food, feed, seeds, fertilizer, insecticides or fungicides by transportation, storage, disposal or cleaning of equipment.

Disposal

Containers: Complete empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of bags in a sanitary landfill or by incineration if allowed by State and local authorities.

Pesticide: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of according to applicable Federal, State or local procedures.

CONDITIONS OF SALE AND WARRANTY

Conditions of Sale

This product is sold subject to and buyer and users are deemed to have accepted the terms contained in the CONDITIONS OF SALE AND WARRANTY, DIRECTIONS FOR USE and PRECAUTIONARY STATEMENTS, which may be varied only by agreement in writing signed by a duly authorized representative of FARMLAND INDUSTRIES, INC.

Inherent Risks

The directions for use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of FARMLAND INDUSTRIES, INC., or the seller. All such risks shall be assumed by the buyer.

Warranty Limitation

FARMLAND INDUSTRIES warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the DIRECTIONS FOR USE, subject to the inherent risks referred to above. FARMLAND MAKES NO OTHER EXPRESSED OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Limitation of Liability

In no case shall Farmland or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. No claim of any kind shall be greater in amount than the purchase price of the product in respect of which such damages are claimed.

SPECIMEN

GENERAL INFORMATION

Atrazine 80W herbicide will control most annual broadleaf and grass weeds in corn, sorghum and sugarcane. It will also control most annual and many perennial broadleaf and grass weeds in noncrop areas and industrial sites. Atrazine 80W may be applied before or after weeds emerge.

The continuous use of this product and other triazines may cause the development of biotypes of grasses and broadleaf weeds that cannot be effectively controlled. Where this is known or suspected, CO-OP ATRAZINE 80W should be either tank mixed with or used in conjunction with a registered grass herbicide approved for use with ATRAZINE which is not in the triazine class of chemicals. Read and follow all directions for use and precautions on the labels of products to be tank mixed with ATRAZINE. Consult your State Extension Service for specific recommendations for your area.

In each case where a range of rates is given, the lower rate should be used on light soils and soils low in organic matter; the higher rate should be used on heavy soils and soils high in organic matter.

Since Atrazine 80W acts mainly through root absorption, its effectiveness depends on rainfall or irrigation to move it into the root zone. Should weeds develop, particularly under dry or minimal moisture conditions, a shallow cultivation or rotary hoeing will generally result in better weed control.

Atrazine 80W is a wettable powder that should be mixed with water and applied as a spray. Make a slurry by adding Atrazine 80W to water. Pour the slurry into the spray tank during or after filling. Sufficient hydraulic (jet) or mechanical agitation should be provided during mixing and application to keep the material in suspension.

Wash sprayer thoroughly immediately after use.

Atrazine 80W is noncorrosive to equipment and metal, nonflammable and has low electrical conductivity.

Care should be taken to avoid using Atrazine 80W where adjacent desirable trees, shrubs or plants might be injured.

Store Atrazine 80W in a dry place.

Ground Application:

For uniform distribution in broadcast applications, TeeJet 8003 or 8004 fan-type or similar nozzles with openings of equal or greater size should be used. For band applications use TeeJet 8003-E or 8004-E or similar type nozzles. Screens in nozzles as well as those in suction and in-line strainers should be not finer than 50-mesh size. A suitable pump with capacity to deliver 10 to 12 gpm should be used and operating pressure should be 35 to 40 psi. Use 20 to 40 gallons of water per acre to assure even coverage unless otherwise specified.

Aerial Application:

Use only where broadcast applications are specified. Apply a minimum of 1 gal. of water for each 1 to 1½ lbs. of Atrazine 80W to be applied per acre.

Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

CORN

One application will control most annual broadleaf and grass weeds such as barnyardgrass, witchgrass, yellow foxtail, wild oats, crabgrass, giant foxtail, velvetleaf, morningglory, lambsquarters, pigweed, ragweed, night shade, purslane and mustard. Atrazine 80W may be applied whether before planting, at planting or after planting using 2½ to 5 lbs. per acre as indicated below.

For pre-plant and pre-emergence application, nitrogen solutions or complete liquid fertilizers may replace all or part of the water as a carrier for Atrazine 80W. Do not apply after corn has emerged as there is danger of liquid fertilizers causing crop injury.

Preplant:

Broadcast in the spring after plowing at the rate indicated in the table below. Application may be made before, during or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of Atrazine 80W. Best results have been obtained when Atrazine 80W is applied within 2 weeks prior to planting.

Pre-Emergence:

Apply during or shortly after planting prior to weed emergence at the rate indicated in the table below.

Post-Emergence:

Apply before weeds exceed 1½ inches in height, at the rate indicated in the table below.

Note: For band applications reduce the broadcast rate of Atrazine 80W in proportion to the area tested.

	Rate per acre of Atrazine 80W		
SOIL TYPE	Broadcast in 20-40 gals. of water/A.	20-inch Band* in 10-20 gals. of water/A.	13-inch Band* in 7-14 gals. of water/A.
Light soils: Sands, loamy sands and sandy loams	2½ lbs.	1¼ lbs.	13 ozs.
Medium soils: Silt and clay loams that are low in organic matter	3 lbs.	1½ lbs.	1 lb.
Heavy soils: Silt and clay loams with medium to high organic matter and clays	3¾ lbs.	1 lb. 14 ozs.	1¼ lbs.
Peats, mucks, and high organic clays (Apply post-emergence only.)	3¾ lbs.	1 lb. 14 ozs.	1¼ lbs.

*Based on 40-inch row spacing. For other band or row widths adjust the rate in proportion to the area actually treated.

Post-Emergence Weed Control with Atrazine 80W-Oil-Water Emulsions

The addition of oil to Atrazine 80W in water sprays may speed the activity of Atrazine 80W and provide quicker kill of weeds. However, under certain conditions the use of oil may seriously damage corn. To minimize the possibility of damage to corn, follow the directions, procedures and precautions given below.

Ground Application:

Broadcast 2½ lbs. of Atrazine 80W and 1 gal. of emulsifiable oil* in 20-40 gals. of water per acre after emergence but before weeds reach 1½ inches in height.

Aerial Application:

Broadcast 2½ lbs. of Atrazine 80W and ½ gal. of emulsifiable oil* in no less than 5 gals. of water per acre after weed emergence but before weeds reach 1½ inches in height.

*For combining with Atrazine 80W, use a crop oil designated for use with Atrazine 80W containing at least 1 percent suitable emulsifier. Several oils of this type are on the market. Oils contaminated with water or other materials can cause compatibility problems and/or crop injury.

Procedures:

(1) Thoroughly clean sprayer prior to use. Do not use sprayer contaminated with 2,4-D or other materials as corn damage or sprayer clogging may result.
(2) In a separate container, make a thin slurry of Atrazine 80W in water, thoroughly wetting the Atrazine 80W.
(3) Fill the spray tank with water, allowing for the addition of the Atrazine 80W.
(4) With the agitation system in operation, add the Atrazine 80W slurry.
(5) Add the emulsifiable oil last.
(6) Empty the tank as completely as possible before refilling to prevent a build up of oil in the tank. Keep the agitation system in operation to avoid a separation of the oil from the water in the spray mixture still remaining in the tank.
(7) If an oil film starts to build up in the tank, drain the tank and clean out with a strong detergent solution or solvent.
(8) Clean the sprayer thoroughly immediately after use by flushing the system with water containing a detergent.

Note:

(1) Do not use oil in Atrazine 80W sprays when corn is under stress from prolonged cold, wet weather, poor fertility or other factors or when corn is wet and succulent from recent rainfall as crop injury may occur.
(2) Do not use oil in sprays when treating inbred lines or any breeding stock as injury may occur.
(3) Adding other insecticides, herbicides, liquid fertilizers, or other materials is not recommended with Atrazine 80W-oil-water emulsions because they may cause compatibility problems or crop injury.
(4) Store and handle emulsifiable oil carefully. Oil contaminated with even a small amount of water may not emulsify properly when added to the tank.
(5) Do not make more than one application of Atrazine 80W-oil-water spray per season.

Precautions:

(1) Do not apply more than 5 lbs. of Atrazine 80W to corn in any one year.
(2) Land treated with Atrazine 80W should not be planted to any crop except corn until the following year or injury may occur.
(3) Following harvest of a treated crop, plow and thoroughly till the soil in fall or spring to minimize possible injury to rotational spring-seeded crops, regardless of the rate used.
(4) If Atrazine 80W is applied after June 10, do not rotate with crops other than corn or sorghum the next year or injury may occur.
(5) If Atrazine 80W is used at a broadcast rate higher than 3¾ lbs. per acre (or comparable rates in a band application), a crop of untreated corn or sorghum should precede the next rotational crop.
(6) In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use Atrazine 80W to control weeds in corn only when corn is to follow corn or a crop of untreated corn or sorghum is to precede other rotational crops.
(7) In western Minnesota and eastern parts of the Dakotas, Nebraska and Kansas, corn treated with Atrazine 80W should not be followed with soybeans if the broadcast rate applied was more than 2½ lbs. per acre (or comparable rate in a band) or injury may occur.
(8) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains or small-seeded legumes and grasses the year following Atrazine 80W application or injury may occur.
(9) Do not graze treated area or feed treated forage to livestock for 21 days following application.

COOP **FARMLAND INDUSTRIES, INC.**
KANSAS CITY, MISSOURI 64116

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BEST COPY AVAILABLE

Northern Nutgrass or Yellow Nutsedge (Cyperus Esculentus) Control
Broadcast 5 lbs. per acre pre-plant, pre-emergence or post-emergence before nutgrass is more than 1½ inches high. If applied before nutgrass begins growth, cultivate within [illegible] weeks. If applied after nutgrass has emerged, cultivate within 10-14 days.
Quackgrass Control on Land Going Into Corn Production
Split Application: Broadcast 2½ lbs. per acre in the fall or spring and plow 1-3 weeks later. Broadcast a second application at the rate of 2½ lbs. per acre in the spring before, during or after planting, but before weeds are 1½ inches high. This split application will control both quackgrass and most annual broadleaf and grass weeds.

Single Application: Broadcast 3¾-5 lbs. per acre in the fall or spring. Plow 1-3 weeks after application.

SORGHUM AND SORGHUM-SUDAN HYBRIDS (GRAIN AND FORAGE TYPES)

Atrazine 80W may be used to control many annual broadleaf and grass weeds in sorghum.
Apply at the rate indicated in the tables below. Weeds should not be more than 1½ inches high at time of application. When making band application, reduce the broadcast rate per acre in proportion to the area treated.

Preplant and Pre-Emergence Application (in eastern and central Nebraska and northeastern Kansas only)**

Broadleaf and Grass Control

Soil type	Broadcast in 20-40 gals of water/A	Rate Per Acre of Atrazine 80W	
		20" band* in 10-20 gals of water/A	13" band* in 7-14 gals of water/A
Sand to sandy loam, eroded slopes and soils low in organic matter	Do not use		
Other soils (Shallow incorporation may improve control.)	2½ to 3 lbs	1¼ to 1½ lbs.	13 ozs. to 1 lb.

*Based on 40-inch row spacing
**See pre-plant recommendations for corn. Non-pressure nitrogen solutions or complete liquid fertilizers may be substituted for all or part of the water as a carrier for Atrazine 80W. Do not apply nitrogen solutions fertilizers after crop emergence as damage may result.

Post-Emergence Application**

Weeds to be controlled and soil type	State or height of sorghum at treatment	Rate per acre of Atrazine 80W		
		Broadcast in 20-40 gals of water per acre	20" band* in 10-20 gals of water per acre	13" band* in 7-14 gals of water per acre
Broadleaf and grass weeds Sand or loamy sand	Do not use			
Sandy loam	See Broadleaf Weeds Below.			
Silt loam to sandy clay loam	Completely emerged	2½ to 3 lbs	1¼ to 1½ lbs.	13 ozs. to 1 lb.
Oltan and Pullman clay soils	At least 6 inches high	2½ to 3 lbs.	1¼ to 1½ lbs	13 ozs. to 1 lb.
Silty clay loams and heavier soils	Completely emerged	3¼ lbs	1 lb 14 ozs.	1¼ lbs
Broadleaf weeds				
Sandy loams and heavier soils in Okla., N.M., Tex., West Kan., Colo. and desert regions of Ariz. and Calif. only	At least 6 inches high	1½ lbs plus ¾ to 1½ pts surfactant	¾ lb. plus ⅜ to ¾ pt surfactant	½ lb. plus ¼ to ½ pt. surfactant

*Based on 40-inch row spacing
**Up to "close-in"

Post-Emergence Broadleaf Weed Control with Atrazine 80W-Oil-Water Emulsions (New Mexico, Oklahoma and Texas Only)
The addition of oil to post-emergence Atrazine 80W-water sprays may speed the activity of Atrazine 80W and provide quicker kill of annual broadleaf weeds. However, under certain conditions, the use of oil may seriously damage sorghum. To minimize the possibility of damage to sorghum, follow the directions and procedures given below.
Ground Application:
Broadcast 1½ lbs. of Atrazine 80W and 1 gal. of emulsifiable oil* in 20-40 gals. of water per acre when sorghum is 6-10 inches in height and before it reaches the boot stage. Treat before broadleaf weeds reach 6 inches in height.
Aerial Application:
Broadcast 1½ lbs. of Atrazine 80W and ½ gal. of emulsifiable oil* in no less than 5 gals. of water per acre when sorghum is 6-10 inches in height and before it reaches the boot stage. Treat before broadleaf weeds reach 6 inches in height.
*For combining with Atrazine 80W, use crop oil designated for use with Atrazine 80W containing at least 1 percent suitable emulsifier. Several oils of this type are on the market. Oils contaminated with water or other materials can cause compatibility problems and/or crop injury.
Procedures:
(1) Thoroughly clean sprayer prior to use. Do not use sprayer contaminated with 2,4-D or other materials as sorghum damage or sprayer clogging may result.
(2) In a separate container, make a thin slurry of Atrazine 80W in water, thoroughly wetting the Atrazine 80W.
(3) Fill the spray tank with water, allowing for the addition of the Atrazine 80W.
(4) With the agitation system in operation, add the Atrazine 80W slurry.
(5) Add the emulsifiable oil last.
(6) Empty the tank as completely as possible before refilling to prevent a buildup of oil in the tank. Keep the agitation system in operation to avoid a separation of the oil from the water in the spray mixture still remaining in the tank.
(7) If an oil film starts to build up in the tank, drain the tank and clean out with a strong detergent solution or solvent.
(8) Clean the sprayer thoroughly immediately after use by flushing the system with water containing a detergent.

Note:
(1) Do not use oil in Atrazine 80W sprays when sorghum is under stress from prolonged cold, wet weather, poor fertility or other factors or when sorghum is wet and succulent from recent rainfall as crop injury may occur.
(2) Do not use oil in Atrazine 80W sprays when treating inbred lines or any breeding stock as injury may occur.
(3) Adding other insecticides, herbicides, liquid fertilizers or other materials is not recommended because they may cause compatibility problems or crop injury.
(4) Store and handle emulsifiable oil carefully. Oil contaminated with even a small amount of water may not emulsify properly when added to the tank.
(5) Do not make more than one application of Atrazine 80W-oil-water spray per season.
Precautions:
(1) Heavy rains immediately following application tend to result in excessive concentrations of herbicide in seed furrow, resulting in possible crop injury. Applications to furrow-planted sorghum should not be made until furrows are leveled (plowed-in). Deep planter marks or seed furrows should also be leveled before application.
(2) Application made to sorghum growing under stress caused by minor element deficiency or to sorghum growing on highly calcareous soils may result in crop injury.
(3) Do not plant any rotational crops other than those specified in the Suggestions for Rotational Crops section below for 18 months following application.
(4) Do not graze or feed forage from treated areas for 21 days following application.
(5) Crop injury may occur when this herbicide is either applied preplant incorporated or pre-emergence in conjunction with an at-planting systemic insecticide.

Suggestions for Rotational Crops:
(1) Sorghum or corn may be planted the year following treatment.
(2) All other rotational crops may be planted 18 months after application.
(3) When the broadcast rate used does not exceed 1½ lbs. per acre, fall wheat may be planted 15 months after application.

Forest and Christmas Tree Plantations

Douglas Fir, Grand Fir, Noble Fir, Lodgepole Pine, Ponderosa Pine and Scotch Pine (Pacific Northwest — west of Cascades only)
Annual broadleaf and grass weed control. Broadcast 2½ to 5 lbs. in sufficient water to assure thorough coverage. For band application, reduce the rate of Atrazine 80W and volume of water in proportion to the area treated. For example, when treating a 4-foot band over trees planted in rows 8 feet apart, apply 1¼ to 2½ lbs. per acre. Apply between fall and early spring while trees are dormant or soon after transplanting and before weeds are 1½ inches high.
Quackgrass control. Broadcast 5 lbs. per acre in sufficient water for adequate coverage. Apply in fall or early spring while trees are dormant and before weed seedlings are more than 1½ inches high. This application will also control most annual broadleaf and grass weeds.
Precautions:
(1) Do not graze treated areas.
(2) Do not apply to seedbeds.
(3) Do not make more than one application per year.

Perennial Ryegrass Grown for Seed (Pacific Northwest only)

For the control of annual broadleaf and grass weeds such as annual ryegrass, rattail fescue and similar species. Broadcast 1½ lbs. in 15 gals. or more water per acre, after first fall rains.

Precautions:
(1) Apply only to perennial ryegrass stands from which a seed crop has been harvested.
(2) Do not apply Atrazine 80W to ryegrass more than 2 years in succession.
(3) Do not graze treated land for at least 12 months.
(4) Do not plant treated land to other crops for at least 16 months.

Nonselective Weed Control on Non-Crop Land: For Use on Fence Rows, Around Utility Poles and Similar Non-Crop Areas.

Apply Atrazine 80W at rates recommended below before or soon after weeds begin growth. Post-emergence applications should be made when weeds are young and actively growing. Use the higher rates on heavy clay and muck soils. Do not contaminate domestic or irrigation water supplies, or lakes, streams or ponds. Use sufficient water to assure thorough coverage. Use at least 1 gal. of water for each pound of Atrazine 80W, more if practical. Mechanical bypass or jet agitation is necessary to keep Atrazine 80W in suspension during application.
Most annual broadleaf and grass weeds. Broadcast 6 to 12½ lbs. per acre.
Hard-to-kill annual and many perennial broadleaf and grass weeds. Broadcast 12½ to 25 lbs. per acre.
For longer residual control in regions of high rainfall and a long growing season, apply 25 to 50 lbs. broadcast per acre.
Hard-to-kill biennial and perennial weeds such as bull thistle and sowthistle. Broadcast 25 to 50 lbs. per acre.
For small areas, 4½ ozs. per 1,000 sq. ft. is equivalent to 12½ lbs. per acre.

Sugarcane

For control of most nonrhizomatous weeds, such as crabgrass, jungle rice, wiregrass, foxtail, amaranths, Flora's paintbrush, fireweed and similar plants. Broadcast 2½ to 5 lbs. per acre in sufficient water for adequate coverage of the soil surface at time of planting or ratooning, but before the cane emerges. One additional application may be made over the cane as it emerges, and two additional applications may be made interline after emergence, as a directed spray.
For control of emerged Pellitory Weed (artillery weed) (Florida only). Apply ½ to ¾ lb. per acre in at least 40 gals. of water per acre as a directed spray. Add 2 qts. of surfactant for each 50 gals. of spray and be sure weed forage is thoroughly covered.
Precautions:
(1) Do not apply Atrazine 80W after "close-in."
(2) Do not apply more than 12½ lbs. of Atrazine 80W to any other crop of cane.

COUNTER®

systemic insecticide-nematicide

FOR USE IN FIELD CORN, POPCORN, SWEET CORN, SUGAR BEETS AND GRAIN SORGHUM

SPECIMEN

Active Ingredient:	
Terbufos (S-[[(1,1-dimethylethyl)thio]methyl] 0,0-diethyl phosphorodithioate)	15.0%
Inert Ingredients	85.0%

EPA Reg. No. 241-238 EPA Est. No.

CYANAMID

KEEP OUT OF REACH OF CHILDREN

DANGER

☠ **POISON** ☠

MAY BE FATAL IF SWALLOWED, INHALED OR ABSORBED THROUGH THE SKIN. RAPIDLY ABSORBED THROUGH SKIN. REPEATED INHALATION OR SKIN CONTACT MAY, WITHOUT SYMPTOMS, PROGRESSIVELY INCREASE SUSCEPTIBILITY TO POISONING.

See Back Panel for Antidote and Other Warnings

¡PELIGRO!
AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente
(ENGLISH TRANSLATION)
DANGER!
(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

FARMLAND INDUSTRIES, INC. COOP
KANSAS CITY, MISSOURI [illegible]

DANGER!

HAZARDS TO HUMANS and Domestic Animals

Do Not Get In Eyes, On Skin, On Clothing

Wear freshly laundered, long-sleeved work clothing daily. While transferring from package to equipment, wear a clean cap and gloves (rubber or cotton). If cotton gloves are used, they must be laundered or discarded after each day's use. Rubber gloves should be washed with soap and water after each use. Do not wear the same gloves for other work. Destroy and replace gloves frequently.

In case of contact, immediately remove contaminated clothing and wash skin thoroughly with soap and water. Launder clothing and decontaminate shoes before reuse. Wash thoroughly with soap and water before eating or smoking. Bathe at the end of the work day and change clothing.

Do Not Breathe Dust

While emptying bags into equipment, pour downwind and allow as little free fall as possible. Do not pour at face level and do not allow dust to reach the breathing zone.

Do Not Contaminate Food or Feed Products

Once a bag has been opened, use it completely. Make sure the hoppers are emptied while still in the field. Refer to STORAGE AND DISPOSAL statement for further instructions.

Keep All Unprotected Persons Out of Operating Areas.
Keep Out of Reach of Domestic Animals.
Not For Use or Storage In or Around the Home.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds and other wildlife. Treated granules exposed on soil surface may be hazardous to birds and other wildlife. Keep out of any body of water. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes.

SPECIMEN

In case of an emergency endangering life or property involving this product, call collect, day or night,
Area Code 201-835-3100.

Antidote: Atropine is an antidote.

CALL A PHYSICIAN AT ONCE IN ALL CASES OF SUSPECTED POISONING

FIRST AID

If swallowed, drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen.

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes and remove contaminated clothing and shoes. Wash clothing and decontaminate shoes before reuse.

NOTE TO PHYSICIANS: Warning symptoms include weakness, headache, tightness in chest, blurred vision, nonreactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhea and abdominal cramps. Give atropine intramuscularly or intravenously, depending on severity of poisoning, 2 to 4 milligrams every 10 minutes until fully atropinized as shown by dilated pupils, dry flushed skin and tachycardia. Twenty to thirty milligrams, or more, may be required during the first 24 hours. Never give opiates or phenothiazine tranquilizers. Clear chest by postural drainage. Artificial respiration or oxygen administration may be necessary. Observe patient continuously for at least 48 hours. Allow no further exposure to any cholinesterase inhibitor until cholinesterase regeneration has taken place as determined by blood tests.

Pralidoxime chloride (2-PAM; PROTOPAM chloride) may be effective as an adjunct to atropine. Use according to label directions.

DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the use or application of the product contrary to label instructions, all of which are beyond the control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

American Cyanamid Company makes no other express or implied warranty, including any other express or implied warranty of FITNESS or of MERCHANTABILITY.

STORAGE AND DISPOSAL

Storage
Store pesticide products in a secure locked area where children, unauthorized persons and animals cannot enter. Do not store in the same area with food or feed. Do not store opened bags.

Prohibitions
Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Pesticide Disposal
Pesticide or spillage that cannot be used according to label instructions must be disposed of according to Federal, State or local procedures under the Resource Conservation and Recovery Act.

Container Disposal
Completely empty bag by shaking and tapping sides and bottom to loosen any clinging material. Empty the residues into the application equipment. Dispose of bags in a sanitary landfill, or by other approved State and local procedures.

General
Consult Federal, State or local disposal authorities for approved alternative procedures such as limited open burning.

SPECIMEN

Use Rates as Pounds per Acre* (based on various row spacings and application rates)
Application Rates (Oz./1,000 Ft. of Row)

ROW WIDTH (inches)	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	14 oz.	16 oz.
40"	3.3	4.9	6.5	8.2	9.8	11.4	13.1
38"	3.4	5.2	6.9	8.6	10.3	12.0	13.7
36"	3.6	5.4	7.3	9.1	10.9	12.7	14.5
34"	3.9	5.6	7.7	9.7	11.6	13.5	15.4
32"	4.1	6.1	8.2	10.2	12.3	14.3	16.3
30"	4.4	6.5	8.7	10.9	13.1	15.2	17.4
28"	4.7	7.1	9.5	11.8	14.2	16.6	18.9
26"	5.0	7.6	10.2	12.7	15.3	17.9	20.4
24"	5.4	8.2	10.9	13.6	16.3	19.1	21.8
22"	5.9	8.9	11.9	14.9	17.9	21.0	24.0
20"	6.5	9.8	13.1	16.3	19.6	22.8	26.1

*See directions for specific use rates on each crop.

CALIBRATION INFORMATION

FIRST READ THE LABEL
It is important that applicator equipment be properly set to deliver the labeled rate. This chart will help determine the desired rate of application.

When label rate is 8 ounces per 1,000 feet of row, use these suggested starting gauge settings, regardless of row spacing:

PLANTING SPEED

APPLICATOR	3 mph	5 mph	7 mph
Gandy	18	24	28
New Noble (Square Hole)	8	12	16
Old Noble (Round Hole)	11	17	23
International Harvester	1 7 0	2 1.5	2 7.5
New International Harvester	1 9.0	2 6.0	3 2 0
New John Deere (Plastic Funnels)	13	19	25
Newest John Deere (Aluminum Funnels)	11	15	19
Old John Deere	1 28	2 6	2 15
Allis Chalmers		All Speeds-Gauge 7	

NOTE: These settings should be used as starting points only. Continually check the amount of COUNTER used against a known length of row or acreage and make further adjustments accordingly. Also, check calibration occasionally to make sure equipment wear, changing moisture conditions, etc., have not caused a change in flow rate.

FARMLAND INDUSTRIES, INC. COOP
KANSAS CITY, MISSOURI 64116

GROUPING OF CHEMICALS FOR STORAGE

Using INFO-5 and 6, develop groups of chemicals that can be stored together. Provide below your groupings and indicate the basis for grouping the chemicals as you grouped them.

Storage, Shipping And Placarding Guide

For Regulated Articles, Feed and Foodstuffs

IMPORTANT The information in this guide is based on data furnished to Mobay Chemical Corporation*, and is believed to be accurate. Specific circumstances in each case may require various modifications of this guide.

Before Warehousing or Storing:
Check to see if other dangerous articles, foodstuffs or feed are in, or adjacent to the same pile of material or open area to be entered. If so, determine the **label and class** for all such material, then check the guide below to see if they can be stored together or adjacent to each other.

Before Shipping:
Check to see if other shipments of dangerous articles, foodstuffs or feed are on the vehicle. If so, determine the **label and class** for all such shipments, then check the guide below to see if they can be shipped together or loaded next to each other.

How to use this chart:
Look for the type of material **to be shipped or stored** (and the corresponding symbol if applicable) in the **left**-hand column. Then, find the type of material **already stored or loaded** in the column across the top. If there is a number where the two columns meet, refer to the boxed instructions at the top of the chart for that number. If there is no number, then the materials are acceptable to store or ship together.

General Warehousing and Storage

1 Smoking is prohibited in all warehousing & storage areas, both inside & outside.

2 All areas must be kept neat & orderly at all times.

3 All material should be stacked in a straight, neat, secure manner in designated bays or piles.

4 All storage piles should be kept as narrow as possible consistent with OSHA requirements.

5 Any & all spillage, either liquid or dry, is to be cleaned up immediately.

6 Clearance should be maintained between the top of the pile & the sprinkler heads or lowest ceiling beam in compliance with OSHA regulations.

7 Adequate clearance should be maintained around lights & heating units to prevent ignition of combustible materials.

8 All leaking or damaged containers must be recoopered or repacked as soon as possible.

9 Do not block access to hose stations, fire extinguishers, safety showers, eye wash stations, first aid kits or electrical switches & panels.

NO SMOKING, MATCHES or OPEN FLAME

1 Do not store these materials with, or next to, each other.

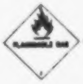
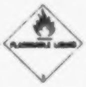
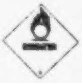
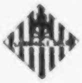
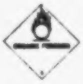
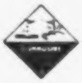
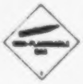
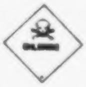
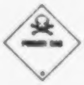
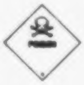
Flammable Gas ·········
Flammable Liquid ······
Oxidizer ······················
Flammable Solid ········
Organic Peroxide ·······
Corrosive ···················
Non-Flammable Gas ·
Chlorine ·····················
Poison Gas ················
Poison ·······················
Liquid Insecticide ·······
Dry Insecticide ···········
Liquid Herbicide ·········
Dry Herbicide ·············
Foodstuffs & Feed ····

Courtesy of Mobay Chemical Corporation

2 **Do not ship** these materials with or next to each other; and **do not store** them with or next to each other.

3 Do not store these materials with or next to each other; do not load them next to each other for shipment.

4 NOT RECOMMENDED WITH

										Liq Ins	Dry Ins	Liq Herb	Dry Herb	Food Feed
•	•	1	1	1	•	•	•	2	•	•	•	•	•	1
•	•	1	1	1	•	•	•	2	•	•	•	•	•	1
1	1	•	•	•	3	•	•	2	•	•	•	•	•	1
1	1	•	•	•	3	•	•	2	•	•	•	•	•	1
1	1	•	•	•	3	•	•	2	•	•	•	•	•	1
•	•	3	3	3	•	•	•	2	•	•	•	•	•	1
•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
•	•	•	•	•	•	•	•	•	•	•	•	•	•	2
2	2	2	2	2	2	•	•	•	•	•	•	•	•	2
•	•	•	•	•	•	•	•	•	•	•	•	•	•	2
•	•	•	•	•	•	•	•	•	•	•	•	3	3	4
•	•	•	•	•	•	•	•	•	•	•	•	3	3	4
•	•	•	•	•	•	•	•	•	•	3	3	•	•	4
•	•	•	•	•	•	•	•	•	•	3	3	•	•	4
1	1	1	1	1	1	1	2	2	2	4	4	4	4	•

(Courtesy of Mobay Chemical Corp.

STORAGE OF AGRICULTURAL CHEMICALS

Standard Procedures:

Keep out of reach of children.
Do not contaminate water, food or feed by storage or disposal.
Do not store adjacent to or near foodstuffs, drugs, feeds or any other material intended for consumption by humans or animals.
Do not use, pour, spill or store near heat or flame. Do not store for prolonged periods at high temperatures.

(Individual product labels should be consulted regarding special storage precautions.)

INFORMATION ON HANDLING LIQUID/FLOWABLE CHEMICALS IN COLD WEATHER

Data from manufacturers and believed to be reliable.

PRODUCT	Store above	PRODUCT	Store above	PRODUCT	Store above
Aggrow Foam	Note below	Eradicane 6.7E	−50° F.	Poast	Note below
Alanap-L	Note below	Eradicane Extra	−50° F.	Pounce	10° F.
Amiben Liquid	32° F.	Fargo EC	32° F.	Pramitol 25E	32° F.
Atrazine Liquid	Note below	Furadan 4F	35° F.	Prefar 4E	42° F.
Avenge	32° F.	Furloe 4EC	30° F.	Princep 4L	Note below
Azodrin 5	Note below	Genep	N S P	Prowl	40° F.
Balan LC	40° F.	Goal	32° F.	Pydrin	N S P
Banvel	N S P	Grain Bin Spray	N S P	Ramrod, Ramrod+Atrazine	20° F.
Banvel II	N S P	Grain Fumigant 80-20	20° F.	Rescue	Note below
Basagran	32° F.	Guthion 2L	55° F.	Reward	−50° F.
Basalin	40° F.	Hoelon	20° F.	Rhonox	Note below
Bicep	Note below	Hyvar XL	N S P	Ridomil 2E	32° F.
Bidrin 8	40° F.	Insectigation Oil	N S P	Ro-Neet 6E	20° F.
Bladex 4L	Note below	Kelthane EC	N S P	Roundup	10° F.
Blazer	32° F.	Kocide 101	N S P	Sencor 4	Note below
Brominal ME4	N S P	Lannate L	32° F.	Sevimol 4	Note below
Brominal 3+3	N S P	Lasso EC	32° F.	Sevin XLR	Note below
Bronco	40° F.	Lasso + Atrazine	40° F.	Sevin Liquid	Note below
Bronate	3° F.	Lexone 4L	Note below	Sonalan	40° F.
Buctril	3° F.	Lindane 40F	32° F.	Spectracide Liquids	32° F.
Butyrac 200	32° F.	Lorox L	32° F.	Spreader-Activator	32° F.
Caporal 4L	Note below	Lorsban 4E	0° F.	Supracide 2E	32° F.
Carbyne 2EC	Note below	Malathion EC	Note below	Surflan A.S.	Note below
Chemhoe FL4	32° F.	Manzate FL	32° F.	Sutan +	−50° F.
Chlordane 4EC	Note below	Manzate 200 FL	32° F.	Sutazine +	−30° F.
Citcop 5E	Note below	MCP Amine	Note below	Telone II	N S P
Citowett Plus	Note below	Metasystox R	0° F.	Terrachlor 2E	0° F.
Comite	N S P	Methoxychlor EC	Note below	Thiodan 3EC	20° F.
Crop Oil Plus	Note below	Milocep	Note below	Tilt	32° F.
Cygon 400	45° F.	Milogard 4L	Note below	Tordon 22K	Note below
Def 6	0° F.	Milo-Pro 4L	Note below	Tordon RTU	Note below
Defoamer	32° F.	MSMA	5° F.	Treflan EC	40° F.
Diazinon AG500	Note below	Nalco-Trol II	32° F.	Treflan MTF	N S P
DiSyston 8	N S P	N-Serve 24, 24E	18° F.	Treflan Pro-5	40° F.
Dithane FZ	32° F.	Ortho-Trol	32° F.	Unite	Note below
DSMA	30° F.	Paraquat Plus	32° F.	Vernam 7E	−50° F.
Dual 8E	Note below	Parathion Formulations	Note below	Vydate L	32° F.
Dyanap	Note below	Pay-Off	Note below	Weedout Formulations	Note below
Dyfonate 4E	−40° F.	Penncap M	Note below		
Eptam 7E	−50° F.				

NOTE: May be stored at temperatures below freezing, but warm to 40° F. and shake well before using.
N.S.P. = No special precautions.

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FIRST AID FOR PESTICIDE POISONING

Cooperative Extension Service • Division of Agriculture • Oklahoma State University
OSU Extension Facts — No. 7453

O. Norman Nesheim, Extension Pesticide Coordinator

Pesticides continue to be important tools in protecting our food and fiber from insects, diseases, weeds and rodents. They are also important in controlling insects and other pests that carry human diseases as well as in maintaining our comfort by controlling biting and nuisance pests in our indoor and outdoor living areas. When properly used, pesticides are beneficial to us; misused, they can be dangerous. Consequently, safety must be continually stressed.

In nearly all poisoning cases due to pesticides, careless handling or improper storage was the cause of the poisoning. According to statistics from the National Clearing House for Poison Control Centers, every year children lead the list of pesticide poisoning cases reported. The same source reports that in 1976 pesticides were number eight out of 25 categories of products ingested by children under 5 years of age. Nearly all pesticide deaths, in both children and adults, are caused by eating or drinking the product. Some pesticide applicators are killed when they breathe a pesticide or get it on their skin, but deaths from occupational exposure are now unusual. Pesticide accidents can be reduced by following a few basic safety rules.

Always read and follow all of the instructions on the label. Everything you need to know to apply the product safely is on the label. Read all of the label *before* purchasing the product and reread it again *before* mixing the product, *before* applying the product and *before* storing or disposing of unused portions of the pesticide or of the empty containers.

Besides instructions and precautions, the label has one of three "signal words" that show how dangerous or toxic the contents are to people (Table 1). Signal words and toxicity levels are determined by the LD$_{50}$ (the dose that will produce death in 50% of exposed test animals) of the pesticide. The lower the LD$_{50}$ the higher the toxicity of the pesticide. For example, a pesticide with an oral LD$_{50}$ of 500 would be much less toxic than a pesticide with an LD$_{50}$ of 5.

Stay out of treated fields, areas or buildings at least until sprays have dried and dusts have settled or longer if the label says so. Some labels have field re-entry statements which tell how long to stay out of treated fields unless you are wearing protective clothing. Field laborers should not be working in the field when pesticide applications are being made and should not re-enter the treated field until the re-entry period has expired unless they are provided with protective clothing as specified by the label.

Table 1. Categories of Acute Toxicity

Categories	Signal Word Required on Label	LD$_{50}$* mg/kg Oral	Dermal
Highly Toxic	"Danger" Poison (printed in red) with skull and crossbones	0-50	0-200
Moderately Toxic	"Warning"	51-500	201-2,000
Slightly Toxic	"Caution"	501-5,000	2,001-20,000
Relatively Non-Toxic	None	over 5,000	over 20,000

*The dose required to produce death in 50 percent of exposed test animals.

RECOGNIZING PESTICIDE POISONING

You should be aware of the early symptoms of poisoning. The symptoms of pesticide poisoning may be similar to those of other types of poisoning and of other diseases. Heat exhaustion, food poisoning, asthma and other illnesses are sometimes confused with pesticide poisoning. The pesticides associated with each chemical class of pesticides (i.e. organophosphates, carbamates, etc.) generally produce similar patterns of symptoms. The poisoning may be so mild that it can scarcely be detected, or it may become increasingly severe, depending upon the dose absorbed. One or more symptoms (headache, dizziness, nausea, etc.) may be common to many kinds of illnesses, whether caused by poisons or by viruses, bacteria, etc. It is not one or two symptoms but the pattern of symptoms that makes it possible to tell one kind of poisoning from another. Some clues to pesticide poisoning are sensations that only the applicator is aware of, such as nausea or headache; others, like an ashen skin color, can be noticed by someone else.

There are two kinds of pesticide poisoning. *Acute* poisoning is the severe poisoning which occurs after exposure to a single dose of pesticide. The appearance of symptoms may be sudden and dramatic or may be delayed. *Chronic* poisoning is the poisoning which occurs as the result of repeated, small, nonlethal doses over a long period of time. Many symptoms may appear such as nervousness, slowed reflexes, irritability or a general decline of health.

The following are general symptoms of pesticide poisoning:

Mild poisoning or early symptoms of acute poisoning: headache, fatigue, weakness, dizziness, restlessness, nervousness, perspiration, nausea, diarrhea, loss of appetite, loss of weight, thirst, moodiness, soreness in joints, skin irritation and irritation of eyes, nose and throat.

FIRST AID FOR PESTICIDE POISONING

Moderate poisoning or early symptoms of acute poisoning: nausea, diarrhea, excessive saliva, stomach cramps, excessive perspiration, trembling, no muscle coordination, muscle twitches, extreme weakness, mental confusion, blurred vision, difficulty in breathing, coughing, rapid pulse, flushed or yellow skin and weeping.

Severe or acute poisoning: fever, intense thirst, increased rate of breathing, vomiting, uncontrollable muscle twitches, pinpoint pupils, convulsions, inability to breathe and unconsciousness.

Medical doctors may be uninformed as to the symptoms and treatment of pesticide poisoning. This is due to the few cases which they treat. Commercial applicators or other large volume users should tell their doctor which of the pesticides (particularly the more toxic ones) they use so that he will know the symptoms and the treatment and have antidotes on hand.

FIRST AID FOR PESTICIDE POISONING

First aid is the initial effort to assist a victim while medical help is on the way. The first step in any poisoning emergency is to call an ambulance or doctor, or both, except when you are alone with the victim. In this situation you must make certain that the victim is breathing and is not further exposed before you leave to make a phone call.

Take the pesticide container or label with you for the doctor. If this is not possible, make sure you know what pesticide the victim was using. Refer to the active ingredients statement on the label and write down the ingredients listed as well as any information regarding treatment of persons exposed to the pesticide.

While waiting for the doctor or ambulance to arrive, give first aid as follows.

WHAT TO DO FOR PESTICIDE POISONING

Poison on the Skin

The faster the poison is washed off the patient, the less injury will result.

Remove clothing.

Drench skin with water (shower, hose, faucet, pond).

Cleanse skin and hair thoroughly with detergent and water. (Detergents and commercial cleansers are better than soap.)

Dry and wrap the victim in a blanket.

WARNING: If at all possible, do not allow any pesticide to get on you while you are helping the victim.

Chemical Burns of the Skin

Remove contaminated clothing.

Wash with large quantities of running water.

Immediately cover loosely with a clean, soft cloth.

Avoid use of ointments, greases, powders and other drugs in first aid treatment of burns.

Pesticides in the Eye

It is most important to wash the eye out as quickly, but as gently, as possible.

Hold eyelids open and wash eyes with a gentle stream of clean running water. Continue washing for 15 minutes or more.

Do not use chemicals or drugs in wash water. They may increase the extent of the injury.

Inhaled Poisons (Dusts, Vapors, Gases)

If the victim is in an enclosed space, do not go in after him without an air-supplied respirator.

Carry patient (do not let him walk) to fresh air immediately. Open all doors and windows.

Loosen all tight clothing.

Apply artificial respiration if breathing has stopped or is irregular. If the heart has stopped, perform cardio-pulmonary resuscitation.

Keep patient as quiet as possible.

If patient is convulsing, watch his breathing and protect him from falling and striking his head. Keep his chin up so his air passage will remain free for breathing.

Prevent chilling (wrap patient in blankets, but don't overheat). Do not give alcohol in any form.

Swallowed Poisons

The most important choice you must make when aiding a person who has swallowed a pesticide is whether you should make the victim vomit. The decision must be made quickly and accurately; the victim's life may depend on it. *Usually it is best to get rid of the swallowed poison fast.* But there are exceptions:

Never induce vomiting if the victim is unconscious or in convulsions. The victim could choke to death.

Never induce vomiting if the victim has swallowed a corrosive poison. A corrosive poison is a strong acid or alkali such as dinoseb, and the victim will complain of severe pain and have signs of severe mouth and throat burns.

Never induce vomiting if the person has swallowed petroleum products (kerosene, gasoline, oil, lighter fluid). Most pesticides that come in liquid formulations are dissolved in petroleum products. The words "emulsifiable concentrate" or "solution" on the pesticide label are signals *not* to induce vomiting in the poison victim if he has swallowed the concentrates. Concentrated petroleum products (like corrosive poisons) cause severe burns. They will burn as severely when vomited back up. If the victim has swallowed a diluted form of these products, however, he should be forced to vomit immediately..

FIRST AID FOR PESTICIDE POISONING

Usually the label will advise you in the First Aid Statement or Statement of Practical Treatment whether a person who has swallowed pesticide should be made to vomit.

HOW TO INDUCE VOMITING

Do not waste a lot of time inducing vomiting. Use it only as first aid until you can get the victim to a hospital. Make sure the victim is lying face down or kneeling forward while vomiting. Do not let him lie on his back because vomited matter could enter the lungs and do more damage.

- First give the patient large amounts of milk or water — 1 to 2 cups for victims up to 5 years old, up to a quart for victims 5 years or older.
- Induce vomiting by using syrup of ipecac (use only on physician's orders) or by putting your finger or the blunt end of a spoon at the back of a victim's throat. Do not use anything that is sharp or pointed! A glass of soapy water will also cause the victim to vomit.

DILUTE POISON QUICKLY

The best first aid for a person who has swallowed a poison is to dilute the poison as quickly as possible and to neutralize the acid or alkali causing the burns. Also, get the victim to a hospital without delay.

- For acid- or alkaline-based pesticides, give the victim water or, preferably, milk — 1 to 2 cups for victims under 5 years, up to a quart for patients over 5 years. Milk is better than water because it dilutes and helps neutralize the poison. Water only dilutes the poison.
- If you are sure the poison is an acid, give the victim milk of magnesia (1 tablespoon to 1 cup of water), baking soda or chalk in water.
- If you are sure the poison is an alkali, give the patient lemon juice or vinegar.

"UNIVERSAL SPONGE"

Use these "sponges" to absorb excess poisons only after first aid suggestions for the corrosive or noncorrosive poisons are followed.

ACTIVATED CHARCOAL

It absorbs many poisons at a high rate. Mix it with water into a thick soup for the victim to drink. Activated charcoal is found in aquarium filters or is available from a drug store.

Homemade Absorber

A homemade "universal sponge" for poison is a mixture of 4 tablespoons of toast (burnt black), 2 tablespoons of strong tea (instant ice tea mix will do), and 2 tablespoons of milk of magnesia. This is used to absorb and neutralize most poisons.

WARNINGS

- Never try to give anything by mouth to an unconscious victim.
- In an emergency, use any source of fairly clean water such as irrigation canals, lakes, ponds, watering troughs, etc. Don't let the victim die while you worry about how dirty the water is.

SHOCK

Sometimes poison victims go into shock. If untreated or ignored, shock can kill a victim even if the poison injuries would not have been fatal.

SYMPTOMS

The skin will be pale, moist, cold and clammy. The eyes will be vacant and lackluster with dilated pupils. Breathing will be shallow and irregular. The pulse will be very weak, rapid and irregular. The victim may be unconscious or in a faint.

First Aid for Shock

Unless he is vomiting, keep the victim flat on his back with his legs raised to 1 to 1½ feet above his head level.

Keep the victim warm enough to prevent shivering. Do not overheat.

If the victim is conscious and has not swallowed any poison, give small amounts of water or a dilute salt solution (½ teaspoon of table salt to 1 quart of water). Give as often as the victim will accept it.

Keep the victim quiet and reassure him often.

FIRST-AID KIT AND ON-THE-JOB USE

A well-equipped first-aid kit that is always readily available can be important in a pesticide emergency. Make up your own Pesticide First-Aid Kit from a lunch pail, tool box or a sturdy wooden box. It should have a tight-fitting cover with a latch so it won't come open or allow pesticides to leak inside. Label it clearly with paint or a waterproof marker.

Contents of a First-Aid Kit

1. A small plastic bottle of a common detergent, used to wash pesticides quickly off the skin.
2. A small plastic container of salt or syrup of ipecac. Salt is used with water to aid a person in shock.
3. A box or plastic container of baking soda or a bottle of milk of magnesia. These mixed with water will neutralize acidic chemicals that have been swallowed.
4. A plastic bottle of lemon juice or vinegar. These are used with water to neutralize basic or alkaline chemicals that have been swallowed.
5. A small package or bag of activated charcoal. Mixed with water and swallowed, activated charcoal acts as an absorber of all pesticides.
6. A shaped plastic airway for mouth-to-mouth resuscitation.
7. A thermos or large plastic bottle (at least 1 pint) of clean water.
8. Simple adhesive bandages, a roll of gauze and tape. All cuts and scrapes should be covered to prevent pesticides from easily entering the body.
9. Change for an emergency phone call should be taped to the inside cover of the first-aid kit.
10. A small, plastic, empty jar with a tight-fitting lid is useful as a drinking glass for inducing vomiting or feeding activated charcoal. It also can be used for collecting vomited matter to take to a doctor.

FIRST AID FOR PESTICIDE POISONING

MEDICAL ANTIDOTES

Medical antidotes are also available to neutralize the poisoning effects of a few other pesticides. Taken improperly, however, these antidotes can be more dangerous than the effects of the pesticide itself. Medical antidotes should be prescribed or given only by a physician. There are no known antidotes for some pesticides. Once a lethal dose has been ingested, the effects are irreversible and terminal.

Any pesticide applicator working with highly toxic carbamate and organophosphate pesticides should have his *cholinesterase* level tested at regular intervals throughout the spray season. The enzyme cholinesterase regulates the chemical transmission of nerve impulses, and the poison victim will die without it. Both carbamate and organophosphate pesticides attack this enzyme in the blood and make it useless.

After a physician has determined the applicator's base level of cholinesterase, a simple blood test will show if this level has decreased. If the cholinesterase level has decreased, the applicator has been overexposed to either organophosphate or carbamate pesticide. He should avoid further contact with these pesticides until his cholinesterase level has returned to normal. In severe cases, medical antidotes must be given.

Atropine sulfate and protopam chloride (2-PAM) can be given to counteract the effects of organophosphates. Atropine sulfate can also be used to treat poisoning from carbamates; however, 2-PAM cannot be used for this purpose. These materials should not be taken unless actual poisoning has occurred.

Tips on tank-mixing pesticides

Growers of corn and other field crops are now tank-mixing more and more pesticides to control weeds, insects and disease. And they save labor in many uses by adding pesticides to fluid fertilizer instead of water as a carrier. Careful tank mixing is important to avoid problems. It works well, as many fruit and vegetable growers have experienced for years.

1. Read the labels carefully for all products you will mix. Follow directions.
2. Do a small scale "jar test" for compatibility as follows:

    Place one pint of carrier-water or fluid fertilizer in a quart jar. Add each pesticide or a pre-mix of pesticide in water, one at a time, and shake well with each addition. Use each product in the same proportion to carrier as it will be in the actual tank mix.

    Unless labels indicate otherwise, add pesticides in this order: first wettable granules or powder, followed by flowables, emulsifiable concentrates, water solubles and their recommended companion surfactants. When tank-mix adjuvants are used, these should be added first to the carrier-water or fluid fertilizer.

    Invert the jar 10 times, then inspect the mixture immediately and after standing quietly for 30 minutes. If a uniform mix cannot be made or if nondispersible oil, sludge or clumps of solids form, the mixture is incompatible and should not be used. Minor separation after 30 minutes, without sludge or clumps and which remixes readily with 10 jar inversions, is tolerable if field spray tank agitation is good and keeps the combination mixed.

3. When you tank-mix in volume, put 2/3 of the carrier in the tank first. Then add pesticides one by one, with wettable powders first. Agitate for thorough mixing after each addition, before pouring in the next. Finish filling the tank with carrier.
4. Keep agitation going at all times on the way to the field, during application and during stops for any reason. Empty the tank preferably on the day of mixing. Do not allow mixture to stand overnight without agitation. Check labels for temperature and humidity data as they affect mixing or delay in use.
5. With any new combination, test your tank mixture on small areas, at varying rates and conditions of use before large scale use. Check your State College or extension agent for test data and on variations in local water supply that may affect performance.
6. Use exact dosage rates for registered tank mixes. Changes may cause crop injury or poor performance on weeds or pests.

833

(Courtesy Stauffer Chemical Co.)

Tips on Tank-Mixing

* Read label carefully.

* Do a small scale " jar test."

* Fill carrier tank 2/3 full.

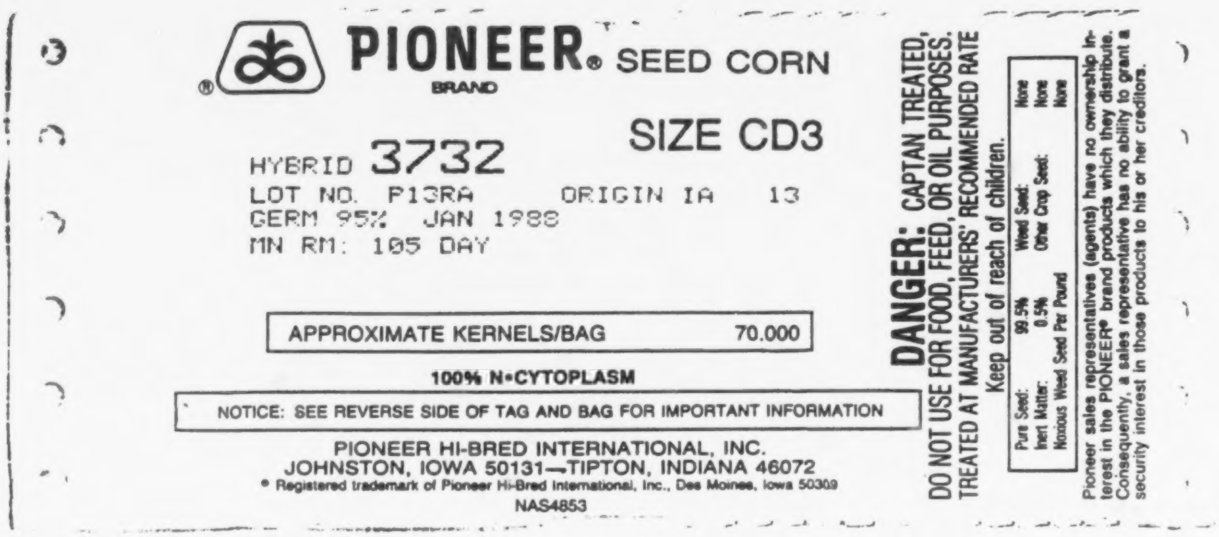
* Add pesticides one by one--wettable powders first.

* Agitate after each addition of pesticide.

* Keep agitation going on the way to the field.

* Test application on small areas.

* Use exact dosages.



PIONEER® SEED CORN
BRAND

SIZE CD3

HYBRID 3732
LOT NO. P13RA ORIGIN IA 13
GERM 95% JAN 1988
MN RM: 105 DAY

APPROXIMATE KERNELS/BAG 70.000

100% N-CYTOPLASM

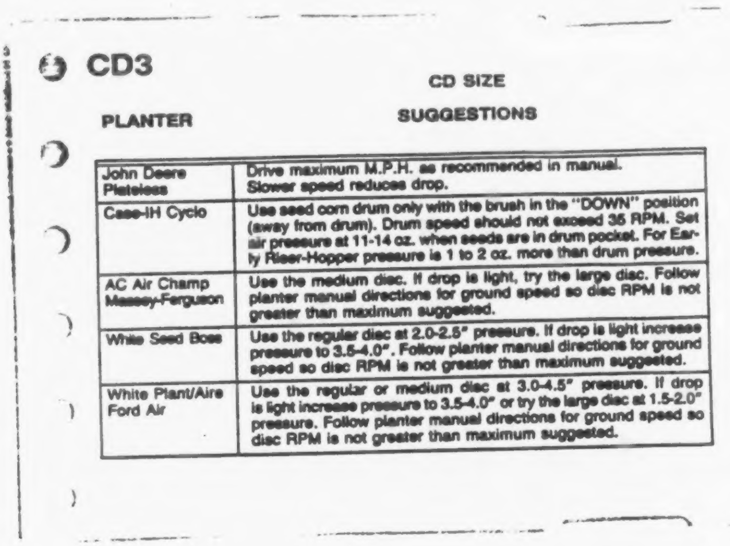
NOTICE: SEE REVERSE SIDE OF TAG AND BAG FOR IMPORTANT INFORMATION

PIONEER HI-BRED INTERNATIONAL, INC.
JOHNSTON, IOWA 50131—TIPTON, INDIANA 46072
® Registered trademark of Pioneer Hi-Bred International, Inc., Des Moines, Iowa 50309
NAS4853

DANGER: CAPTAN TREATED,
DO NOT USE FOR FOOD, FEED, OR OIL PURPOSES.
TREATED AT MANUFACTURERS' RECOMMENDED RATE
Keep out of reach of children.

Pure Seed:	99.5%	Weed Seed:	None
Inert Matter:	0.5%	Other Crop Seed:	None
Noxious Weed Seed Per Pound			None

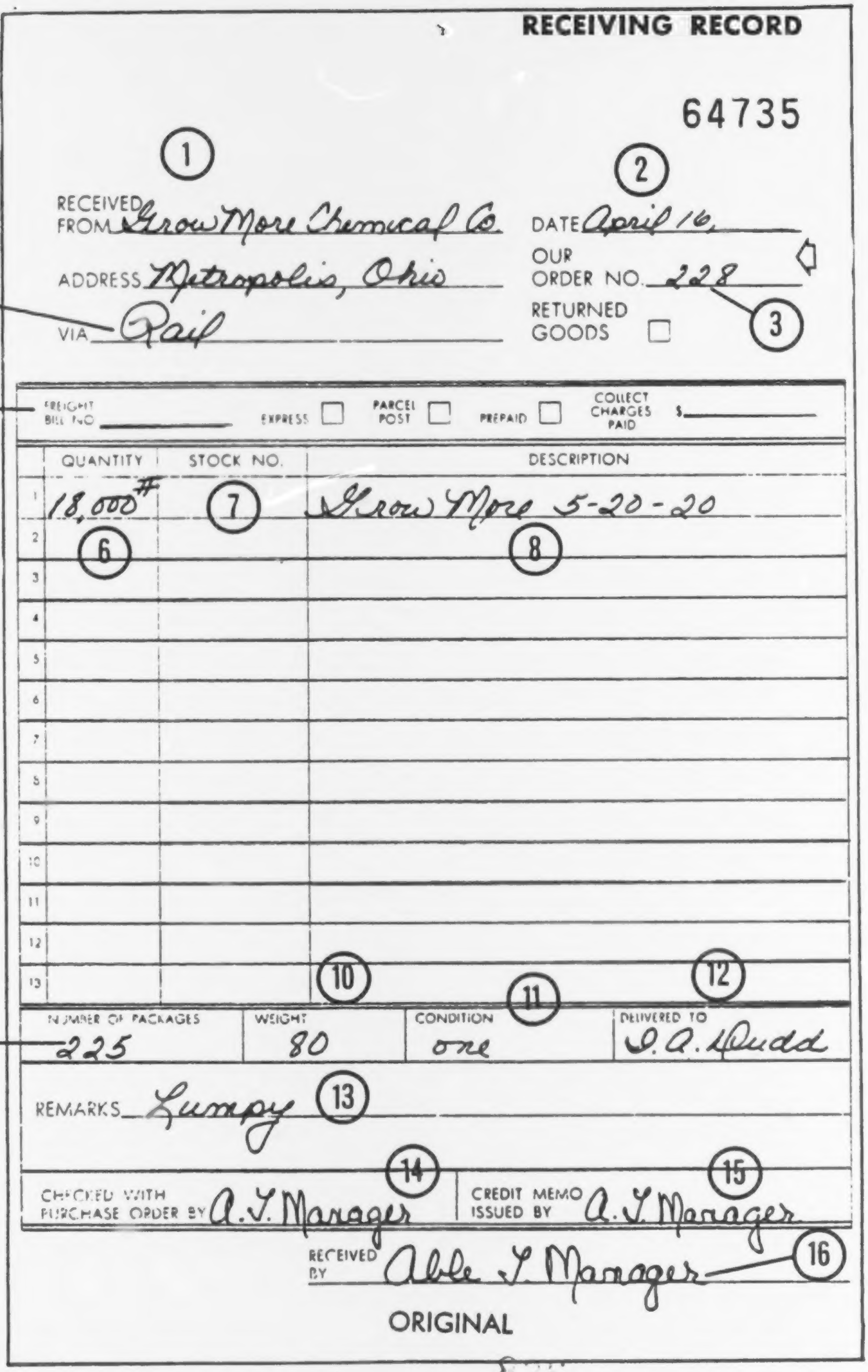
Pioneer sales representatives (agents) have no ownership interest in the PIONEER® brand products which they distribute. Consequently, a sales representative has no ability to grant a security interest in those products to his or her creditors.



CD3

PLANTER	CD SIZE SUGGESTIONS
John Deere Plateless	Drive maximum M.P.H. as recommended in manual. Slower speed reduces drop.
Case-IH Cyclo	Use seed corn drum only with the brush in the "DOWN" position (away from drum). Drum speed should not exceed 35 RPM. Set air pressure at 11-14 oz. when seeds are in drum pocket. For Early Riser-Hopper pressure is 1 to 2 oz. more than drum pressure.
AC Air Champ Massey-Ferguson	Use the medium disc. If drop is light, try the large disc. Follow planter manual directions for ground speed so disc RPM is not greater than maximum suggested.
White Seed Boss	Use the regular disc at 2.0-2.5" pressure. If drop is light increase pressure to 3.5-4.0". Follow planter manual directions for ground speed so disc RPM is not greater than maximum suggested.
White Plant/Aire Ford Air	Use the regular or medium disc at 3.0-4.5" pressure. If drop is light increase pressure to 3.5-4.0" or try the large disc at 1.5-2.0" pressure. Follow planter manual directions for ground speed so disc RPM is not greater than maximum suggested.

835



RECEIVING RECORD

64735

RECEIVED FROM Grow More Chemical Co.

DATE April 16,

ADDRESS Metropolis, Ohio

OUR ORDER NO. 228

VIA Rail

RETURNED GOODS ☐

FREIGHT BILL NO. ______ EXPRESS ☐ PARCEL POST ☐ PREPAID ☐ COLLECT CHARGES PAID $______

	QUANTITY	STOCK NO.	DESCRIPTION
1	18,000#		Grow More 5-20-20
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

NUMBER OF PACKAGES	WEIGHT	CONDITION	DELIVERED TO
225	80	one	S. A. Dudd

REMARKS Lumpy

CHECKED WITH PURCHASE ORDER BY A. T. Manager

CREDIT MEMO ISSUED BY A. T. Manager

RECEIVED BY Able T. Manager

ORIGINAL

ORIGINAL—NOT NEGOTIABLE

STRAIGHT BILL OF LADING—SHORT FORM

Shipper's No. 19

① P. O. & R. Rail Road (Name of Carrier)

Carrier's No. 60

②

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading,

at March 31 19 From Grow More Chemical Co, Metropolis, O.

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official, Southern, Western and Illinois Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

③ Consigned to Farm Supply Company

(Mail or street address of consignee—For purposes of notification only.)

Destination Farmer State Ohio County X Delivery Address ★

(★ To be filled in only when shipper desires and governing tariffs provide for delivery thereof.)

④ Route A. B. & C. Shreveport P. O. & R.

Delivering Carrier P. O. & R. Car or Vehicle Initials UTLX No. 72794

No. Packages	Kind of Package, Description of Articles, Special Marks, and Exceptions	*WEIGHT (Subject to Correction)	Class or Rate	Check Column
225	80# bags 5-20-20 Grow More Fertilizer			
⑤				

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

If charges are to be prepaid, write or stamp here; "To be Prepaid."

Received $

to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per

(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

$

†Shipper's imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission.

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

per

†The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of the Consolidated Freight Classification.

⑥ Shipper, Per Agent, Per 1

Permanent post-office address of shipper, Grow More Chemical Co., Metropolis, Ohio

ORIGINAL

INVOICE

NO. ①

②

DATE March 31, 19

④

SOLD TO Farm Supply Company
Farmer, Ohio

SHIPPED TO Farm Supply Co.
Farmer, Ohio

③

YOUR ORDER NO. ⑤ 228	OUR ORDER NO. ⑥ 60	SALESMAN ⑦ Bob	⑪ FOLD
⑧ DATE SHIPPED March 31, 19	SHIPPED VIA ⑨ Rail	F.O.B. ⑩	TERMS Cash 30 days

QUANTITY ORDERED	QUANTITY SHIPPED	STOCK NUMBER/DESCRIPTION	PRICE	PER	AMOUNT
18,000#	18,000#	Grow More 225-80# bags, 5-20-20 Fertilizer	60⁰⁰	T	540 00
⑫	⑬	⑭	⑮	⑯	⑰

ORIGINAL

COMPLETING RECEIVING FORMS

A shipment of seed and chemicals has arrived at your place of employment, The Sunny View Agricultural Supply Store. As you unload the merchandise, you must fill out a receiving report. Using the following information, complete the receiving report and complete the purchase order, bill of lading, and invoice as they should appear to support your receiving record.

Wholesale Seed and Chemical Company of Shipley, Ohio, has shipped to The Sunny View Agricultural Supply Store of Ames, Iowa, an order of merchandise. It was tranported by Fastway Transport's truck number 515. It was routed via St. Louis to Des Moines to Ames. The supplies stock number was 82493. The merchandise was needed on April 25, 1988. Your boss, James Green, authorized the purchase.

50-50 lb. bags of Atrazine 80W
30-2/2.5 gal. cartons of Dual
3-30 gal. drums of Treflan M.T.F.
2-30 gal. drums of Crop Oil
150-50 lb. bags of #3333 seed corn
125-50 lb. bags of #3334 seed corn
125-60 lb. bags of #9775 soybean seed
100-60 lb. bags of #9700 soybean seed (2 of the bags were broken open

PURCHASE ORDER

NO.____________

TO____________ DATE________ 19____

ADDRESS____________

SHIP TO____________

ADDRESS____________

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT

OUR ORDER NUMBER MUST APPEAR ON INVOICES, PACKAGES AND CORRESPONDENCE ACKNOWLEDGE IF UNABLE TO DELIVER BY DATE REQUIRED.

____

Buyer____________

ORIGINAL

RECEIVING RECORD

64734

RECEIVED FROM____________________ DATE____________

ADDRESS____________________ OUR ORDER NO.____________

VIA____________________ RETURNED GOODS ☐

FREIGHT BILL NO.________ EXPRESS ☐ PARCEL POST ☐ PREPAID ☐ COLLECT CHARGES PAID $________

	QUANTITY	STOCK NO.	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

NUMBER OF PACKAGES	WEIGHT	CONDITION	DELIVERED TO

REMARKS____________________

CHECKED WITH PURCHASE ORDER BY	CREDIT MEMO ISSUED BY

RECEIVED BY____________________

ORIGINAL

CSS-1

Page 43

ORIGINAL—NOT NEGOTIABLE

STRAIGHT BILL OF LADING—SHORT FORM

Shipper's No.__________

____________________ Carrier's No.__________

(Name of Carrier)

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

at __________ 19 ____ From __________

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official, Southern, Western and Illinois Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to__________

(Mail or street address of consignee—For purposes of notification only.)

Destination__________ State__________ County__________ Delivery Address ★__________

(★ To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Route__________

Delivering Carrier__________ Car or Vehicle Initials__________ No.__________

No. Packages	Kind of Package, Description of Articles, Special Marks, and Exceptions	*WEIGHT (Subject to Correction)	Class or Rate	Check Column

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

____

(Signature of Consignor)

If charges are to be prepaid, write or stamp here; "To be Prepaid."

Received $__________
to apply in prepayment of the charges on the property described hereon.

____

Agent or Cashier

Per__________
(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

$ __________

†Shipper's imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission.

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

per

†The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of the Consolidated Freight Classification.

__________ Shipper, Per__________ Agent, Per__________

1

Permanent post-office address of shipper

ACT-14d

844

845

INVOICE

NO.

DATE ____________________

SOLD TO ____________________ SHIPPED TO ____________________

____________________ ____________________

____________________ ____________________

YOUR ORDER NO.	OUR ORDER NO.	SALESMAN	
DATE SHIPPED	SHIPPED VIA	F.O.B.	TERMS

FOLD

QUANTITY ORDERED	QUANTITY SHIPPED	STOCK NUMBER/DESCRIPTION	PRICE	PER	AMOUNT

ORIGINAL

FILLING CUSTOMER ORDERS

You have been handed a sales receipt to be filled and loaded onto the customer's truck. The order calls for bagged fertilizer which is packaged in 50 pound bags.

How many bags of each type of fertilizer will Mr. Mills receive?

FARMERS CO[illegible]P. ELEV. CO.

CUSTOMERS BIN NO. ➧

Buyer *Harold Mills*

Address *Rt 2, Butler*

Hauler *picked up* Date Wanted

No. of Acres Spread Spreading Rate Per Acre lbs.

	Fertilizer Grade	Quantity
	18-46-0	
750	34-0-0	120.00
	0-46-0	
	0-0-60	
1250	8-32-16	200.00
	45-0-0	
	6-24-24 AMMO. PHOS.	
	6-24-24 CHEM. COMB.	
	13-52-0	
500	12-12-12	80.00
	6-18-6	
	ANHYDROUS AMMONIA:	

GUARANTEED ANALYSIS			
			Total Amount of Batch
N	P_2O_5	K_2O	

B 2418

849

PROBLEM AREA 2

WHAT TECHNIQUES OF SELLING SHOULD AN EMPLOYEE POSSESS WHEN SELLING SEEDS, CHEMICALS, AND FERTILIZERS?

Contents

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Teaching Outline...1

TM-1 When Opening a Sale..................................9

TM-2 Types of Questions to Ask When Selling a Product...10

ACT-3 Sales Demonstration Rating I.........................11

TM-4 Steps in Making a Successful Sale....................12

ACT-5 Sales Demonstration Rating II........................13

TM-6 When Selling Over the Telephone......................14

ACT-7 Determining Proper Fertilizer Blends.................15

PROBLEM 2: What techniques of selling should an employee possess when selling seeds, chemicals, and fertilizers?

INTEREST APPROACH:

Have a first-rate salesperson give a sales demonstration. Explain to the students that good preparation is always important for any task.

STUDY QUESTIONS:

1. What is meant by an opening statement and what does it include?
2. What type of questions do you ask to determine attitude and need of the customer?
3. What are the steps to a sale?
4. How should telephone customers be handled?
5. What forms are necessary when making business sales?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Create better relations with classmates. Student Learning Activity #1.

Creating self-confidence. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Improve students' communication skills. Student Learning Activity #3.

Problem solving on helpling problem farmers meet their needs. Student Learning Activity #4.

Improve students' writing and spelling skills. Student Learning Activity #3.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Critical thinking improved on questioning the customers. Student Learning Activity #3.

Enable students to ask more probing questions to customers. Student Learning Activity #3

Improve decision making skills efficiently. Student Learning Activity #2.

Distinguish between relevant and irrelevant information. Student Learning Activity #3.

STUDENT LEARNING ACTIVITIES:

1. Review and discuss the information about opening, making, and closing a sale on TM-1 and 2. Demonstrate before the class how a sale of an agricultural product is made properly using a member of the class as the customer. Divide the class into groups of two and assign two products to sell to each group, one for each student. Have one student assume the role of salesperson and the other the role of customer. Allow

groups time to practice selling their product. When the practice period is over, have one-half of the group demonstrate selling their products before the class. Have members of the class analyze each sale using ACT-3. Share student evaluations asking those who evaluated the demonstrations to discuss why they evaluated as they did.

2. Review and discuss the five steps in making a successful sale (TM-4). Have the other half of the student groups described in Student Learning Activity #1 demonstrate the sale of their products before the class. Have the other students evaluate these demonstrations using ACT-5. Share student evaluations asking those who evaluated the demonstrations to discuss why they evaluated as they did.

3. Present to the class and discuss the use of a telephone in an agricultural business as described in TM-6. Secure two phones from the local telephone company and demonstrate proper employee and customer roles when selling over the telephone. Develop several typical situations that confront agricultural businesses that are handled over the telephone. Divide the class into groups of two and assign a situation to each group. Have students demonstrate before the class how that situation should be handled over the phone. Discuss each demonstration with the class after the group is finished.

4. Using the situation described in Act-7a, 7b, and 7c, have students complete a sales slip.

CONCLUSION:

The best way to catch a prospective customer's interest is by getting straight to the point in your opening questions.

Tell who you are.

Ask how you can help them.

Tell how the product will benefit the customer.

Ask open questions for general information. Ask closed questions for specific information. Then ask questions for details of operation, plans, and problems.

Five steps to sale:

The friendly greeting:

Immediately acknowledge the customer's presence with a friendly greeting.

The customer has two concerns or "fears" when entering a store. First, there is the fear of not being waited upon immediately. There has been too many occasions in the past where the customer had to take the initiative and hunt down a salesperson. Secondly, the customer is afraid the salesperson will be the "manipulator." A sincere, friendly greeting will put the customer's mind to rest on both accounts.

The effectiveness of the friendly greeting rides on two factors: what is said and the manner of delivery.

Find appropriate greetings with which you are comfortable. Introduce yourself by giving your name. If you know the customer's name, use it in the greeting. If you don't know it, try to find out.

Your voice should be cheerful and you should smile when speaking. Your greeting should be business like and serious but not gruff or abrupt. Your greeting should also be respectful. It should let the customers know that they are important. But the most important requirement is that the greeting be sincere and natural.

Discover the customer's needs:

This means finding out what the customer consciously or unconsciously looks for, wants, or needs. Behind every sale of a product is a motive--a reason for buying. The customer's buying motive is never the desire to own the product itself, but rather to gain something the product will provide.

Buying needs. What product does the customer want and what are the reasons for buying one product over another. Basically, a customer buys to satisfy one or more of the following wants or needs: safety, comfort, economy, or prestige.

Ask questions. It is essential to most sales that you ask questions. Ask questions that require more than a simple yes or no answer. Since many customers are not very talkative, watch facial expressions carefully. They can give you additional clues to his/her needs.

Listen. Listen intently to the customer's answers. Be alert and listen for keys or clues that will indicate what the customer wants and needs most. By being a good listener you are going to get that customer to be much more attentive when it is your turn to recommend a product.

Recommend a product:

The customer will be expecting your advice and looking to you as the expert--as the person who knows which product is most appropriate. You must recommend a specific product and present it to the prospective customer. Your selection and recommendation of the right product for your prospect is a matter of experience and judgement. The important thing to remember during this step is that you want to arouse the customer's interest. You want to focus customer attention to a new product and give the customer something to think about.

Explain features and benefits (the FAB formula):

Convert the product's features into advantages and disadvantages:

The feature is a material, ingredient, or physical characteristic in a product. It answers the questions, "What is it?"

An advantage of a feature is the performance characteristic of the feature. It answers the questions, "What will it do?"

The benefit of the feature is the ultimate benefit the customer will receive by using the product with this feature. It answers the question, "What will it do for me?" In most cases, a customer "benefit" relates to one or more of four wants or needs: safety, comfort, economy, or prestige. The salesperson should therefore direct the sales presentation to show how the product (or feature of the product) will satisfy these needs.

Selling up:

Too many salespeople pay very little attention to or disregard completely the business of selling-up, or selling better quality products for the job to be done. The customer benefits, you benefit, and your store benefits when better products are sold. Selling the customer a better quality benefits you and your store. The higher you go up the product line, the better the profit becomes.

Close the sale:

This is the final step and one which many salespeople fail to do. If you have presented the evidence, it should naturally follow that you should verify that the customer is satisfied with the product and then ask for the sale. This should be done as soon as possible. However, do not "high pressure" the prospects. Do not make the customers feel that they are being forced into something.

Handling the telephone customer:

Answer promptly. Customers will quickly form mental images that are less than complimentary if they have to wait for the third or fourth ring before your answer.

Do not pick up the phone and then continue a conversation with someone else.

Asking a caller to wait a moment and then leaving the phone, even for half a minute, is equally bad from the caller's viewpoint. A 30-second wait can seem like 30 minutes to the caller who expects a prompt, courteous answer.

Answer with a quick, simple, easy to understand, courteous, but business like manner.

The first thing most people are interested in is identification of the business itself; and, secondly, the name of the person who has answered the phone. Without this immediate identification, the caller usually is forced to ask if he or she has reached the right place.

"Good morning. Thank you for calling (store name). (Your name) speaking."

"Good morning. (Store name), (your name) speaking."

Hints for handling telephone customers:

Be alert, be pleasant, be expressive, be natural, speak distinctly, use the customer's name, every call is important, try to visualize the person, be attentive, take time to be helpful, keep your promises, say "Thank you" and "You're welcome."

Quoting prices on the phone:

Quote the price of the lowest priced product that fills the need of the caller.

Most importantly, get the customer to come into the store. The only way you can make money from the phone is to get the customer to come into the store and buy.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify the steps to a sale.

Distinguish between a feature, an advantage, and a benefit of their product.

Use questions to determine attitude of the customer.

Be able to summarize and confirm a commitment from a customer.

Be able to properly handle telephone customers.

Be able to complete forms necessary to the sales operation.

REFERENCES:

Purina's Best Selling Techniques Manual. Available through local dealer.

How to Sell Coop Tires. Farmland Industries, Inc. Farmland Industries, Inc., North Kansas City, Missouri.

Principles of Management in Agribusiness. Duft, Kenneth D. Reston Publishing Company, Inc., Reston, Virginia, 1979.

When Leading the Customer to a Sale

Use the business name in all discussions.

Tell the customer your name.

Find out and remember customer's name.

Determine customer's needs.

FERTILIZER
5-10-5

When Closing a Sale

Display a friendly manner at the close.

Have all materials and equipment that will be needed.

Realize that begging for a sale makes the salesperson and the offer look bad.

Ask the prospect to "OK" or approve the order rather than sign it.

Make buying as easy and painless as possible.

Try for privacy at the close.

Study each prospect as a baseball pitcher studies each batter.

Lead the prospect to think of himself as the owner of the product from the beginning of interview.

SALES DEMONSTRATION RATING I

Students: ______________________________, ____________________________

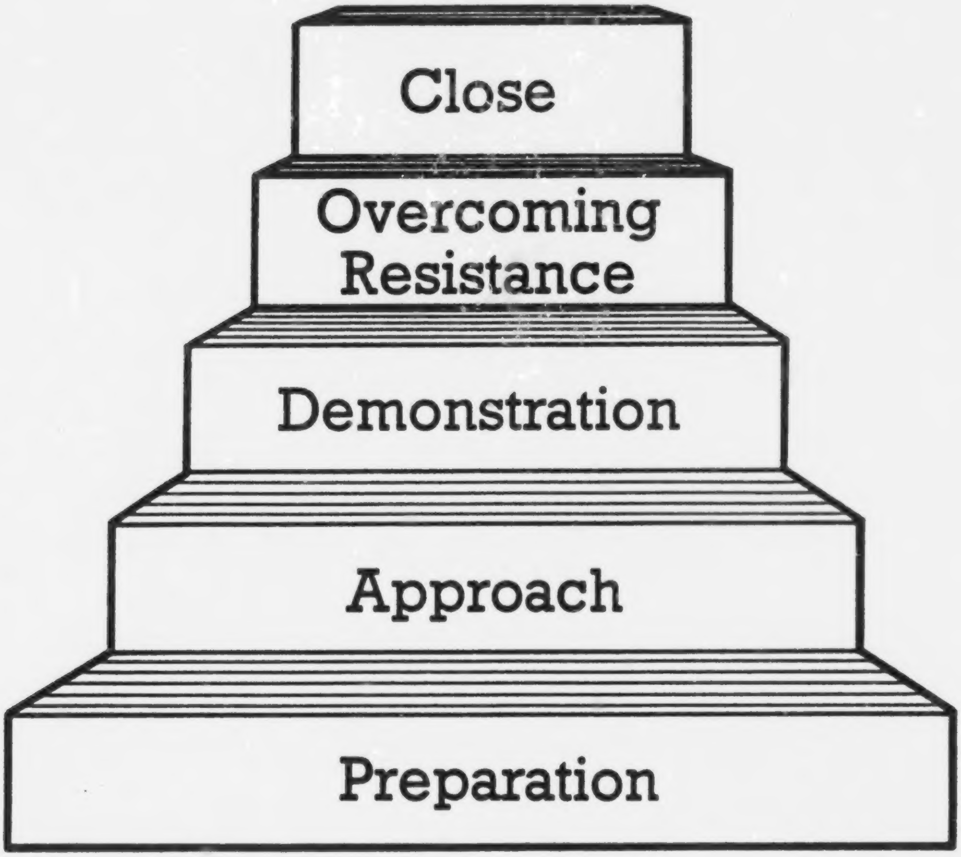
Rate each sales demonstration using the following criteria:

	High				Low
Opening statement	5	4	3	2	1
Open questions	5	4	3	2	1
Closed questions	5	4	3	2	1
Detail questions	5	4	3	2	1
Closing of sale	5	4	3	2	1

Total score __________

What would have improved the sale?

Five Steps In Making A Sale


Close
Overcoming Resistance
Demonstration
Approach
Preparation

SALES DEMONSTRATION RATING II

Students: ______________________________, ____________________________

Rate each sales demonstration using the following criteria:

	High				Low
Greeting	5	4	3	2	1
Discovered customer's needs	5	4	3	2	1
Recommended a product	5	4	3	2	1
Explained product benefits and features	5	4	3	2	1
Closed sale	5	4	3	2	1

When Selling on the Telephone

* Answer promptly
* Be business-like
* Be alert and pleasant
* Quote prices
* Get customers to come into store

DETERMINING PROPER FERTILIZER BLENDS

Ron Roberts, a local farmer, has come into the store where you work. He wants to spread dry fertilizer on 110 acres of ground that will be planted to corn. Ron wants to apply 120 pounds of actual nitrogen, 60 pounds of actual phosphate, and 75 pounds of actual potash.

As a salesperson, you must now figure how much of each type of fertilizer must be blended together to make the combination at Ron needs and fill in the sales receipt. Ron also wants to rent a spreader and will be charging the rental costs to his account.

Materials used in the blend are:

N	P	K
33-0-0	18-46-0	0-0-60
@$175/ton	@$245/ton	@$159/ton

Spreader rental
is $1/acre

Blending charge
is $1/10 ton

Finance discount
of 2% if paid
within 15 days

Total price must
be paid within 30 days

Lee Albert, a local farmer, has given you a check to pay his outstanding bill. Payment was made for the following items:

Fertilizer	$2,352
Seed	700
Chemicals	1,780

Complete the form ____________ to show this.

K 0-0-60 @ $

$\frac{75\#/\text{acre}}{.60}$ = 125#/acre

125# x 110 acres = 13,750# (6.875 tons)

6.875 tons x $______________ = $

P 18-46-0 @ $

$\frac{60\#/\text{acre}}{.46}$ = 152.17#/acre

152.17# x 110 acres = 16,738.70# (8.369 tons)

8.369 tons x $______________ = $

N in 18-46-0

152.17 # x 0.18 = 27.39# of N in 18-46-0

N 33-0-0 @ $

120#/acre - 27.39# in the 18-46-0 = 92.61# of 33-0-0 are required per acre

$\frac{92.61/\text{acre}}{.33}$ 280.63#/acre

280.63# x 110 acres = 30,869.30# (15.435 tons)

15.435 tons x $____________ = $

Blending $1 x 3.068 (tons x 10) = $3.07

Spreader rental - 110 acres x $1 per acre = $110

FS

CENTRAL IOWA FS, INC.

TICKET NUMBER ☐ 38801

DATE

CUSTOMER

MATERIAL	CODE	QUAN.	PRICE	AMOUNT
% AMMONIUM NITRATE	564			
% UREA	566			
% TRIPLE SUPER PHOSPHATE	563			
% DI-AMMONIUM PHOSPHATE	562			
% POTASH	570			
TRACE ELEMENTS	534			
PF SOLUTIONS	575			
ANHYDROUS	576			
		SUB TOTAL		
BLENDING	592			
SPREADING	593			
HAULING	594			
	241	STATE SALES TAX		
		SUB TOTAL		
	599	CASH DISCOUNT		
TERMS OF SALE		TOTAL		
CASH ☐ CHARGE ☐	DELIVERY TICKET #'S			

A FINANCE CHARGE (DISCOUNT) OF______% $________WILL BE DEDUCTED IF PAID BY THE______OF________19______; THE TOTAL CHARGE IS PAYABLE BY THE______OF THAT MONTH.

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CSS-2

FS

CENTRAL IOWA FS, INC.

TICKET NUMBER ☐ 122341

DATE

CUSTOMER

	TRANS CODE	SLM NO	PROD CODE	AMOUNT
PETROLEUM			3	
FEED			4	
PLANT FOOD			5	
GRAIN			6	
L.P. GAS			7	
SEED			1	
CHEMICALS			2	
FARM AUTO EQUIP.			8	
	3	0	0	
AMOUNT PAID				

RECEIVED PAYMENT ____________________

CASH ☐ CHECK ☐

ACT-7d

869

PROBLEM AREA 3

WHAT ARE THE MAJOR FUNCTIONS AND RESPONSIBILITIES OF AN AGRIBUSINESS MANAGER?

Contents

Page

Teaching Outline.....1

TM-1 "A manager does his/her work by getting others to do theirs.".....11

TM-2 A good manager must know when and how to provide direction and assistance.....12

INFO-3 Bob Doe's Typical Week.....13

TM-4 Manager's Duties.....14

TM-5 Steps in Decision Making.....15

TM-6 Steps in Delegating Responsibility.....16

TM-7 Five Habits or Abilities of a Good Manager.....17

TM-8 Problems which may confront managers in their businesses.....18

TM-9 Rewards of Management.....19

UNIT: Crop Services and Supplies

PROBLEM 3: What are the major functions and responsibilities of an agribusiness manager?

INTEREST APPROACH:

A manager for a crop supply and service business has decided to increase sales in seed corn this year. He has appointed Jim Johnson to manage the project.

Jim's approach to increasing sales of seed corn was to purchase 100 bags of late maturing corn and 100 bags of early maturing corn. He established the goal of selling all the bags of seed corn that he had purchased.

Jim planned to visit farmers in his community and call prospective customers to increase his sales. After making a few calls Jim sold all of the seed corn he had ordered. Customers continued to call for seed corn, but Jim turned customers down because he had to order more corn which would take a week to obtain and his customers did not want to wait.

Jim reported to you that he had increased sales by selling all of the corn and that his project was successful. Do you agree with Jim's analysis? What should Jim have done to manage his project correctly?

STUDY QUESTIONS:

1. Why is good management important for the success of a business?

2. What is the basic job of the manager of an agricultural supply business?

3. What is the work day for a manager like?

4. What are some general function of management?

5. What are the five major functions of a manager in an agribusiness?

6. What is delegation and how can a manager use delegation to assign tasks to employees?

7. What five habits or abilities should good agribusiness managers possess?

8. What problems often confront managers?

9. What are some of the rewards of good management?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Understand the basic role of the manager in any business. Student Learning Activity #2.

Understand the importance of delegation in a business. Student Learning Activity #4.

Recognize qualities of a good manager. Student Learning Activity #5.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Learn to work with managers. Student Learning Activity #4.

Learn to assign and accept responsibility. Student Learning Activity #1.

Develop management skills. Student Learning Activity #5.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Understand the responsibilities of a manager. Student Learning Activity #2.

Realize how to accept responsibilities. Student Learning Activity #4.

Understand management decisions. Student Learning Activity #3.

STUDENT LEARNING ACTIVITIES:

1. Have students read the references and list the roles and characteristics of a good manager. Discuss their lists and summarize with a review and discussion of TM-1 and 2.

2. Invite a manager from a local crop service and supply business to talk to the class about his/her responsibilities as a manager. Have students list these responsibilities shared by the guest speaker and discuss them in class.

   Hand out INFO-3 which describes activities of a manager of an agricultural business. Have the guest speaker review and discuss the schedule with the class.

3. Have students study the references and list the tasks performed by managers and how they make business decisions. Review and discuss these tasks and decision making steps using TM-4 and 5.

4. Invite several employees of agribusinesses in the community to speak as a panel before the class. Have them share the responsibilities of their jobs and how responsibility is delegated in their businesses. Review and discuss how responsibility is delegated in an agribusiness using TM-6. Select an agricultural supply business and have them list the types of workers

who work in that business. List all the responsibilities of the manager and indicate those tasks that the manager could delegate to each of the employees.

5. Review and discuss the abilities which good managers should possess in TM-7.

6. Have the students, in pairs, interview a manager in a local agricultural business. Have students seek out and list both problems and rewards that the manager realizes in his work as a manager. Summarize and discuss the students' lists in class. Compare those lists with information provided in the references and information in TM-8 and 9.

CONCLUSION:

A manager is:

Someone who works with and through others to accomplish the goals of a business.

A manager does his/her work by getting other people to do theirs.

The manager serves many functions:

He/she must be a leader of a group of subordinates, a leader of a group of peers, a teacher, a decision maker, disciplinarian, helper, consultant, or simply an observer.

Good management is important for the success of a business.

Almost all business success can be attributed directly or indirectly to good management practices.

Almost all business failures can be directed to management breakdown or oversight.

The basic job of the manager:

The manager's job is to make things happen so that business can achieve its goals.

Managing involves getting all the parts of the business to function together to reach business goals.

These parts include personnel, marketing strategies, finance, and records.

No two days of the manager's work day are exactly the same. Daily demands often require changing schedules to meet new problems.

Some general functions of management are:

Performing a variety of jobs each week.

Planning or organizing and controlling work of other people.

Giving and receiving a lot of information.

Using their judgement and accepting responsibility for their decisions.

Guiding the business toward business goals.

The five functions of a manager in an agribusiness are:

Planning: Choosing the process for conducting his/her business.

Set goals and objectives.

Set policies, procedures, and methods to accomplish goals.

Plans must be constantly reviewed and updated.

Organizing: The manager's ability to group and assign activities that are needed to accomplish the goals of the business. You must identify the resources and the number of people to carry out the plan.

Staffing: Managers must decide who will do the job. They must recruit, select, train, promote, and discharge employees.

Directing: The manager's ability to get people to accomplish the tasks that are assigned to them. This involves motivating, communicating, and leading staff.

Motivation: the manager must understand the various behaviors of people and how to motivate them.

Communication: the manager must be able to communicate with and listen to employees, clients, and the community.

Ability to lead: the manager's ability to lead reflects his/her basic assumption about people.

Controlling: evaluation is the chief source for improvement. For a successful business you must be able to evaluate formally and informally.

A manager uses delegation to assign jobs to other employees.

Delegation means entrusting responsibility to someone else. It allows the manager to handle other responsibilities of the business.

Steps in delegating responsibility effectively to other employees are:

Defining clearly and creatively the responsibilities which will be delegated to each person. Be sure that agreement is reached on which areas the person can function freely and where the limits are.

Delegating whole jobs and not just bits and pieces. Give the employee responsibility for the whole job and not just the responsibility for a small part of the job.

Choosing the right person for the right job. Maximize strengths of employees and minimize weaknesses. Seek out skills and knowledge required to complete the assigned job.

Setting mutual goals and standards of performance. Your expectations as manager must be clearly defined.

Giving accurate and honest feedback. Employees want to know how they are doing.

Supporting your co-workers - share knowledge, information, and plans for the future with your employees. Get employees involved in the business.

Giving your employees the opportunity to contribute to the decision making process.

Allowing your employees the opportunity to complete the responsibilities which you have assigned without looking over their shoulders.

Five habits or abilities which good managers should possess are:

Time management--know where the time goes:

Eliminate things that are just busy work.

Decide what you can delegate to someone else.

Identify time wasters such as unimportant meetings or memos.

Oriented to goals--they focus on the outward contribution:

Concentrate on the results rather than the work.

Provide a positive role model--they build on strengths, not weaknesses:

Include not only their own strengths, but their superiors, colleagues, and subordinates.

Be able to accept the best in others and not feel threatened.

Realize that they also have the responsibility to help others grow.

Feed opportunities and starve problems.

Set priorities for their business--they concentrate on the few major areas where superior performance will produce outstanding results:

Pick the future as opposed to the past.

Focus on opportunity instead of problems.

Choose their own direction instead of following someone else's lead.

Aim high for something that makes a difference instead of limiting your goals to only the safe and easy things.

Good decision making skills--they make effective and rational decisions:

Define the problem.

Analyze the problem.

Determine alterantive solutions.

Decide on the best solutions.

Convert the decision making into effective action.

Skill in decision making is often the factor that makes the difference between a manager's success and failure.

Good decision making requires knowing everything you can about the problem.

Manager's work is never clear cut:

Each day a manager deals with many different projects at different stages. A manager may be planning one project, organizing another, and supervising two or more in progress.

Are you capable of:

Dealing with many projects during the day.

Remembering details from one project while you mentally "change gears" and concentrate on solving problems in another project.

Listen calmly to a person who interrupts your work on one project to report a serious snag in another project.

Or do you react to such pressure by:

Becoming nervous and irritable.

Criticize the person presenting the problem so that he or she will go away and not bother you.

Forget project details and responsibilities.

Concentrate so hard on one project that you can't recognize when another problem may require your attention.

Rewards of management:

Personal satisfaction realized from the successful operation of their business because of their decisions.

Managers are able to exercise all of their managerial skills required to do a job. An individual's self-respect and self-reliance are strengthened.

The opportunity to deal with a wide variety of people on different levels. Example, customers, employees, suppliers, and community representatives.

EVALUATION:

Upon completion of this lesson, students will be able to:

Define manager and his/her importance to the success of the business.

List the five major functions of a manager.

Be able to define delegation and list characteristics of effective delegation.

Identify and define the importance of good manager habits.

Identify the rewaqrds and problems associated with becoming a manager.

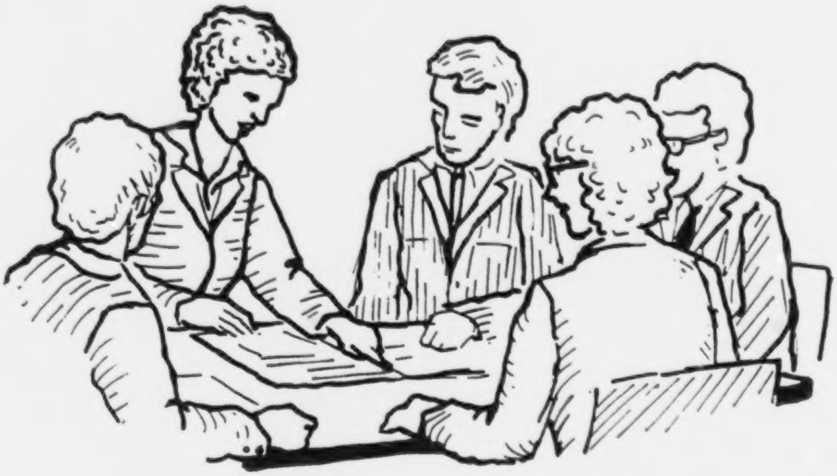
OPTIONAL LEARNING ACTIVITIES:

1. Visit a local agribusiness in your community and identify jobs involved in operating a crop service and supply business.
2. Select a student in your class to serve as the manager of your next fund raising activity. Have the manager delegate responsibility to other members in the class.

REFERENCES:

The Effective Management of Volunteer Programs. Wilson, Marlene. Volunteer Management Associates, 279 South Cedar Brook Road, Boulder, Colorado 80302. Eighth Printing, 1983.

Managing the Business. The National Center for Research in Vocational Education. Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210, Unit 11, Level 1, (PACE) Program for Acquiring Competence in Entrepreneurship, 1983.



"A manager does his/her work by getting other people to do theirs"

Teacher

Disciplinarian

Leader of peers

Consultant

Observer

Leader of subordinates

Decision maker

A good manager must know when and how to provide direction and assistance.

BOB DOE'S TYPICAL WEEK

Monday

- Make work assignments
- Make sales calls on prospective clients
- Lunch
- Visit Farmer Brown on fertilizer needs
- Visit with sales rep of seed corn dealer
- Plan work assignments and check ending balances
- Go through mail

Tuesday

- Talk to new customers
- Pick up supplies
- Lunch
- Return calls
- Check advertisements for newspaper
- Go through mail and sign bills

Wednesday

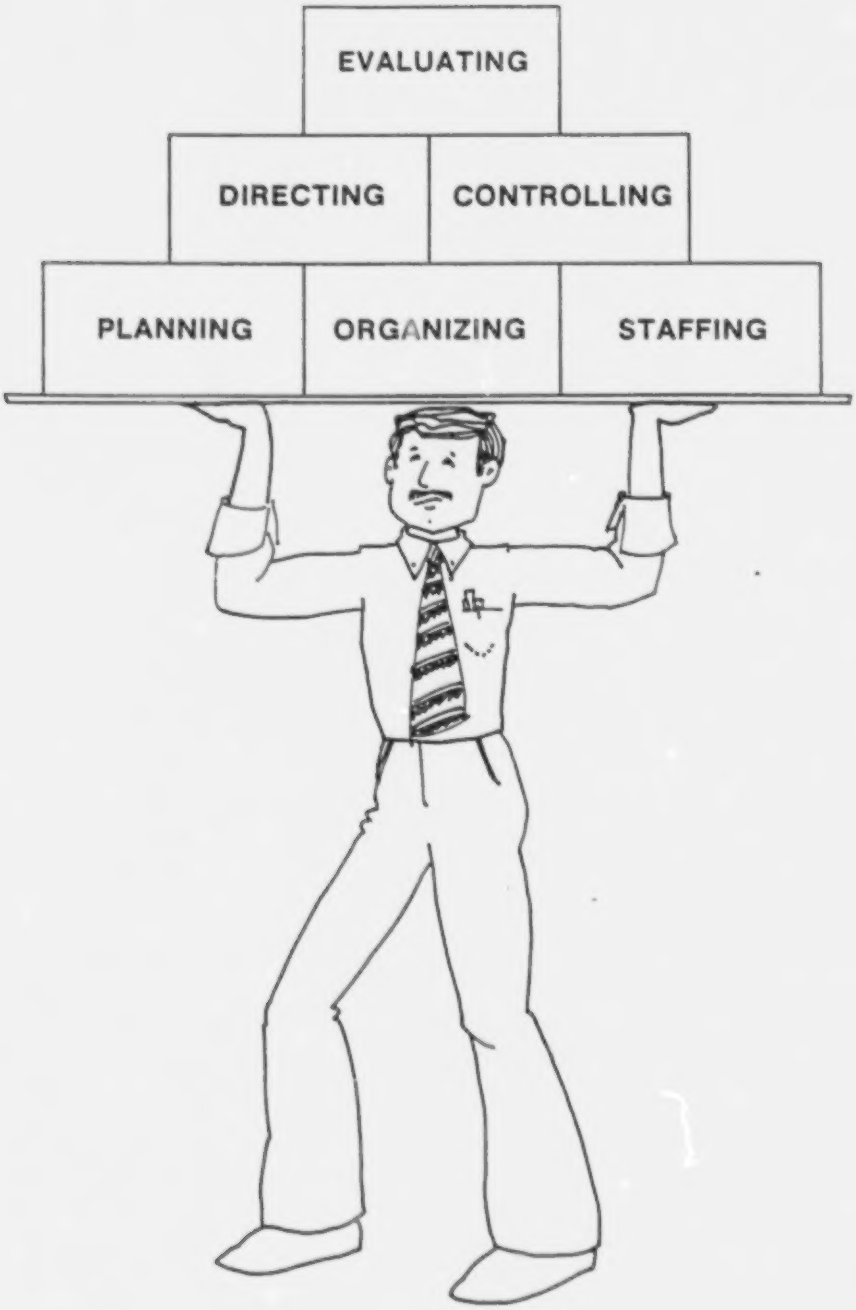
- Review inventory and order supplies
- Lunch
- Make phone calls
- Go through mail
- Figure and submit bid for large chemical job
- Consult with customer
- Check progress on work assignments

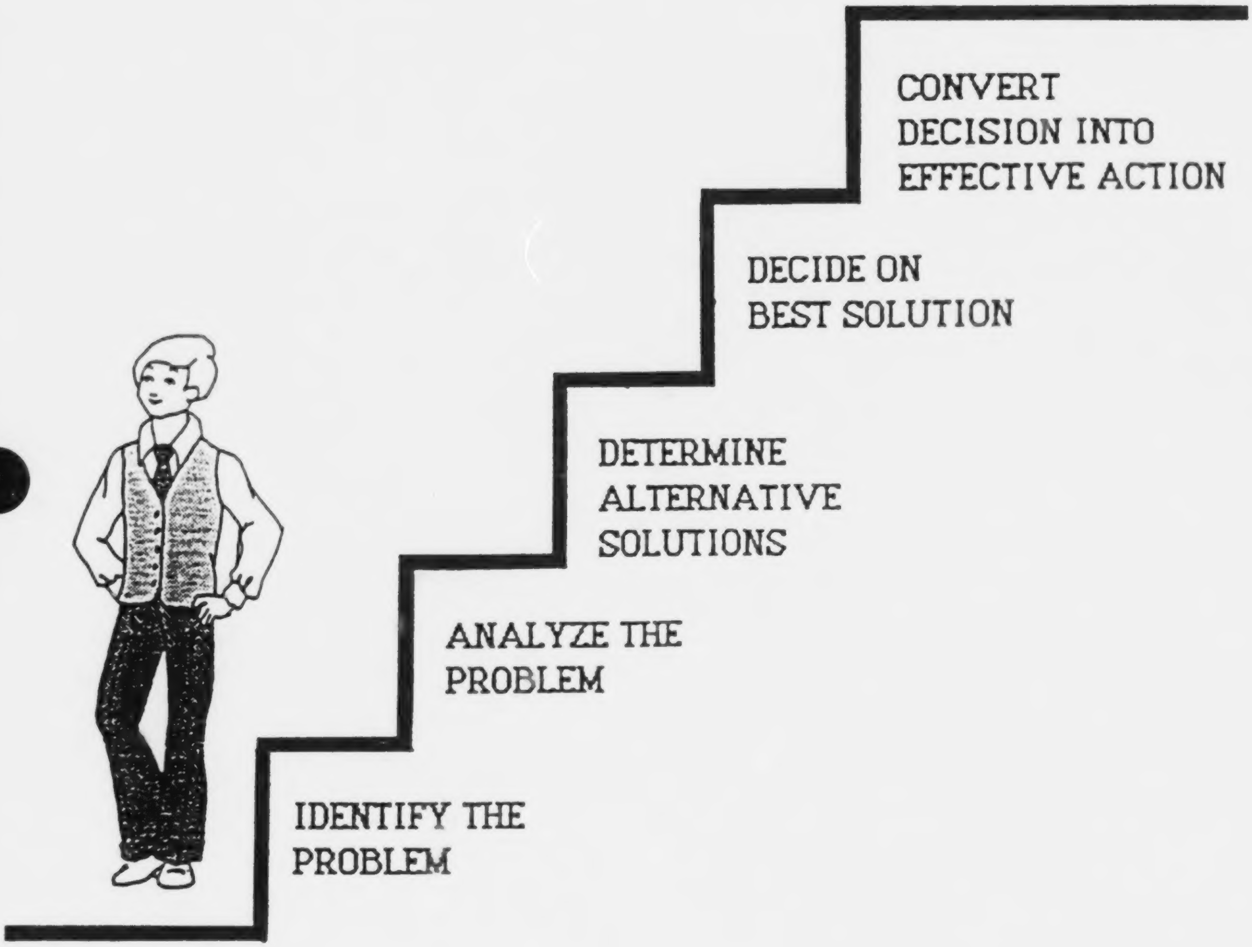
Thursday

- Deal with unsatisfied customer
- Meet with equipment dealer
- Place material order spring supplies
- Talk with salesperson
- Lunch
- Visit potential customer
- Visit potential customer
- Return calls
- Go through mail and pick up delivery

Friday

- Check work assignments
- Visit Job Site I
- Plan next week's work
- Lunch
- Check repair of sprayer equipment
- Go through mail and talk to secretary about letters
- Call service person for copy machine
- Call ad agency
- Plan work assignments


EVALUATING
DIRECTING
CONTROLLING
PLANNING
ORGANIZING
STAFFING



IDENTIFY THE PROBLEM

ANALYZE THE PROBLEM

DETERMINE ALTERNATIVE SOLUTIONS

DECIDE ON BEST SOLUTION

CONVERT DECISION INTO EFFECTIVE ACTION

STEPS IN DECISION MAKING

STEPS IN DELEGATING RESPONSIBILITY:

Defines responsibilities

Delegates jobs

Chooses the right person for the right job

Sets goals and standards of performance

Gives accurate, honest feedback

Supports co-workers

Gives employees the opportunity to contribute

Allows employees the opportunity to complete responsibilities

FIVE HABITS OR ABILITIES OF A GOOD MANAGER:

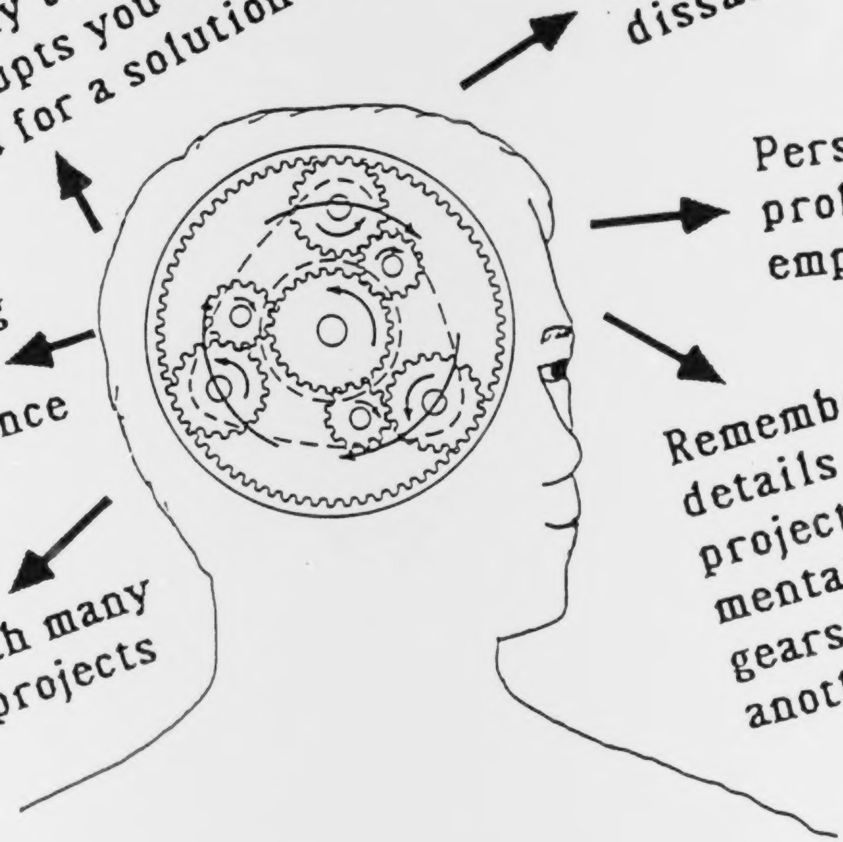
Manages time

Oriented to goals

Provides a positive role model

Sets priorities

Possesses good decision-making skills



Listen calmly to a person who interrupts you on one project to ask you for a solution to another

Customer satisfaction or dissatisfaction

Personality problems of employees

Monitoring employee performance

Remembering details of one project and then mentally "changing gears" to handle another

Dealing with many different projects

Problems which may confront managers in their businesses

REWARDS OF MANAGEMENT:

Can use all of their managerial skills

Build self-respect and self-reliance

Personal satisfaction

Work with a wide variety of people

PROBLEM AREA 4

WHAT DOES AN EMPLOYEE NEED TO KNOW ABOUT TROUBLE-SHOOTING, PREVENTATIVE MAINTENANCE, AND RECORD KEEPING?

Contents

Page

Teaching Outline....1
TM-1 Shop Repair Report....7
ACT-2 Using the Shop Repair Report....8
TM-3 Record of Equipment Costs....10
ACT-4 Using the Record of Equipment Costs....11
TM-5 Purchase Order....13
ACT-6 Using the Purchase Order....14
TM-7 When Estimating Repair Costs....16
ACT-8 Estimating Repair Costs....17

LESSON 4: What does an employee need to know about trouble-shooting, preventative maintenance, and record keeping?

INTEREST APPROACH:

Bring a piece of machinery such as a fertilizer spreader or anhydrous ammonia applicator to class. Ask the students what parts of the machine could cause potential problems and what should be done to prevent costly repairs or injury. Ask the students what should be done to the machine to prepare it for off-season storage and to prepare it for use after storage.

STUDY QUESTIONS:

1. Why is "trouble-shooting "of equipment problems important?
2. What preventative maintenance is important to machine life?
3. What records are important for maintenance procedures?
4. How are repair costs estimated?

LEARNER NEEDS:

Many student learning needs can be enhanced thorugh instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

Cooperation with others in reaching a common goal. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Strengthen the students' ability to follow written directions. Student Learning Activity #3.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Identifying stated and unstated assumptions. Student Learning Activity #2.

Recognizing logical inconsistencies in a line of reasoning. Student Learning Activity #6.

STUDENT LEARNING ACTIVITIES:

1. Bring to class several nurse tanks that need wheel bearings packed and several ammonia applicators that need to have hoses checked and replaced. Discuss with the students the importance of the maintenance of these machine parts. Demonstrate how to check for potential problems and properly repair them. Have students check and repair the hoses on the other ammonia applicators and pack the wheel bearings on the other nurse tanks.

2. Have students secure operators manuals for machines owned and operated by local farm supply businesses. For each machine, have students list maintenance activities for each machine and develop a schedule for completing these activities.

3. Review and discuss the importance and use of the "Shop Repair Report" using TM-1. Have students complete ACT-2a and 2b.

4. Review and discuss the importance and use of the "Record of Equipment Costs" using TM-13. Using the "Shop Repair Report" developed in ACT-4a, have students complete the "Record of Equipment Costs" in ACT-4b.

5. Review and discuss the purpose of purchase orders and how they are utilized using TM-5. Have students complete ACT-6a and 6b and review their work in class.

6. Using TM-7, discuss how repair costs are estimated for a customer. Have students complete ACT-8a and 8b.

CONCLUSIONS:

Trouble-shooting alerts operators to potential problems in machine operation:

Operational checks during use, such as:

- Exhaust system
- Controls
- Steering
- Warning lights
- Hydraulics

Operational checks before starting, such as:

- Loose parts
- Broken parts
- Seat adjustment
- Coolant
- Air cleaner
- Brakes

Tires

Vandalism

Keep alert to changes in machine performance.

Keep all equipment in safe operating condition.

Check machine before using it.

Service it regularly.

Accidents can happen when:

Machines are out of adjustment.

Worn parts are not replaced.

Shields are not in place.

Remember to check machine before using.

Recommendations that enchance machine life:

Remember to follow maintenance schedules to avoid potentially dangerous failures.

Engines tuned up:

To prevent small problems from becoming big ones.

To prevent costly repairs and higher operating costs.

Preparation for off season storage of equipment includes:

Machine cleanup.

Engine tune-up.

Oil changes.

Rust inhibitor added to oils.

Pack bearings.

Release tension on belts and chains.

Lubricate grease fittings.

Disengage clutches.

Clean fuel system.

Remove battery.

Block tires off ground.

Remove tire ballast.

Coat metal surface with paint or grease.

Order repair parts.

Place inside or cover machine.

To place machine back into service:

Replace protective covers.

Engage clutch.

Check tires.

Service and install battery.

Service - oils and grease.

Check belt and chain tension.

Add fuel.

Idle engine before working it.

Records important to maintenance procedures are:

Maintenance schedule

Purchase order

Repair costs are estimated by listing broken and worn parts that need replacing, listing their costs, and estimating the cost of labor for the repair.

EVALUATION:

Upon completion of this lesson, students will be able to:

Competently identify the importance of troubleshooting.

Perform important preventative maintenance techniques.

Estimate the repair cost on a machine.

Complete the necessary records for maintenance procedures.

REFERENCES:

Fundamentals of Machine Operation: Agricultural Machinery Safety. Richard Bittner, Clint Bolton, Roy Childers Jr., Howard Doss, Harold Hughes, Leroy Pickett, Robert Wilkinson. 1974. Deere and Company, Moline, Illinois. A study manual.

Fundamentals of Machine Operation: Machinery Management, Bowers, Wendell. 1975. Deere and Company, Moline, Illinois. A study manual.

Grain, Feed, Seed, and Farm Supply Technology, edited by the U.S. Office of Education (U.S. Department of Health, Education, and Welfare, Washington, D.C.), U.S. Government Printing Office.

Agricultural Supplies and Services, Dr. Richard Welton and Michael Marks. 1975. Southern Illinois University.

SHOP REPAIR REPORT

EQUIPMENT NUMBER 79	MAKE AND MODEL	OPERATOR

DATE IN 2-22-87	DATE OUT 2-26-87	DOWN TIME-IN HRS. 96	ODOMETER OR HOURMETER READING

MECHANIC'S NAME	DESCRIPTION OF WORK	LABOR HRS	LABOR AMOUNT	
Jim	Replaced auger and bearings in	7	$56	00
	grain auger.			

OIL, GREASE AND ANTIFREEZE			
	QTS. OIL ⊕		
	QTS. TRANS. FLUID ⊕		
	LBS. GREASE ⊕		
	TOTAL LUBRICANTS		
	QTS. ANTIFREEZE ⊕		
898			

TOTALS	COSTS	
TOTAL LABOR	$56	—
TOTAL EXPENDABLE PTS.	—	
TIRES AND TUBES		
TOTAL REPAIR PARTS	295	61
TOTAL LUBRICANTS		
TOTAL ANTIFREEZE		
OUTSIDE REPAIRS		
TOTAL COST	$351	61

PARTS USED

QTY	PART NO.	DESCRIPTION	TOTAL COST	
		BATTERY		
		BELTS		
		BLADES		
		FILTERS		
		POINTS		
		SPARK PLUGS		
		TOTAL EXPENDABLE PARTS		
		TIRES		
		TUBES		
		TOTAL TIRES AND TUBES		
		REPAIR PARTS:		
1	28231	auger	285	61
2	42653	bearings	10	—
		TOTAL REPAIR PARTS	295	61

CSS-4

Page 7

TM-1

USING THE SHOP REPAIR REPORT

You are the foreman for the service department of the Brooklyn Farm Supply business. It is a large business that has a department that performs minor business equipment maintenance repairs. The business has just completed minor repairs and maintenance on the following company equipment. Record these repairs on the shop repair reports:

Truck #214 - 1988 Ford F600: 36,453 miles

	Cost	Time
Replaced alternator	$67.00	30 min.
Replaced fan belt	5.00	15 min.
Changed oil and filter		
8 qts. oil @ .95		
filter	4.50	30 min.
Packed front wheel bearings		
1/4 lb. great @ $1.50		5 hr. 30 min.
Added 1/2 gal. antifreeze		
3.25 gal.		5 min.

Cost of labor @ 12.50 hr.
Date serviced: May 16, 1988

Anhydrous ammonia applicator #18

	Time
Replaced hoses: 4 @ 3.65/hose	1 hr. 30 min.

SHOP REPAIR REPORT

EQUIPMENT NUMBER	MAKE AND MODEL	OPERATOR	
DATE IN	DATE OUT	DOWN TIME-IN HRS.	ODOMETER OR HOURMETER READING

MECHANIC'S NAME	DESCRIPTION OF WORK	LABOR		
		HRS	AMOUNT	

OIL, GREASE AND ANTIFREEZE				TOTALS	COSTS	
	QTS. OIL @			TOTAL LABOR		
	QTS. TRANS. FLUID @			TOTAL EXPENDABLE PTS.		
	LBS. GREASE @			TIRES AND TUBES		
	TOTAL LUBRICANTS			TOTAL REPAIR PARTS		
				TOTAL LUBRICANTS		
	QTS. ANTIFREEZE @			TOTAL ANTIFREEZE		
				OUTSIDE REPAIRS		
	901			TOTAL COST		

PARTS USED

QTY	PART NO.	DESCRIPTIO
		BATTERY
		BELTS
		BLADES
		FILTERS
		POINTS
		SPARK PLUGS
		TOTAL EXPEN
		TIRES
		TUBES
		TOTAL TIRES A
		REPAIR PARTS
		TOTAL REPAIR

CSS-4

TM-3

RECORD OF EQUIPMENT COSTS

DATE of Purchase Sept. 1 19 86
Cost $ 18,500 **Trade-in Value**
Depreciation Schedule %
Mileage Start End
Radio SN Call No.

MACHINE No. 12
Description Truck
Special Attachments
No.
No.

DATE	REPAIRS		FUEL		GREASE		LUB. OILS		ANTI	CUTTIN
	Labor-Parts		Gallons	Cost	Pounds	Cost	Quarts	Cost	FREEZE	EDGES
3-9-87	#95.00	210.51	20	22.50	1/2	3.00	8	6.40		
4-10-87			20	22.50	1/2	3.00	8	6.40		
TOTAL										

TIRE REPAIR	FILTERS	TUBES TIRES	LABOR	COST	
				#337.41	
412.00	7.50		8.00	459.40	

USING THE RECORD OF EQUIPMENT COSTS

Using the equipment described in Learning Activity #3, place the information in the appropriate spaces on the Record of Equipment Costs:

Additional information is needed on both pieces of equipment.

Truck:

Purchase date: June 1, 1987
Purchase price: $17,250
Depreciation: 20% per year

Anhydrous Ammonia Applicator:

Purchase date: March 15, 1985
Purchase price: $1,875
Depreciation: 30% per year

CSS-4

ACT-4b

RECORD OF EQUIPMENT COSTS

DATE of Purchase ______________ 19 ___

Cost $ ______________ Trade-in Value ______

Depreciation Schedule %

Mileage Start ________ End ________

Radio SN ____________ Call No. ____________

MACHINE No. ____________

Description ____________

Special Attachments

____________ No. ___

____________ No. ___

DATE	REPAIRS		FUEL		GREASE		LUB. OILS		ANTI	CUTTINC
	Labor	Parts	Gallons	Cost	Pounds	Cost	Quarts	Cost	FREEZE	EDGES
TOTAL										

TIRE REPAIR	FILTERS	TUBES TIRES		COST	
			LABOR		

CSS-4

TM-5

Central Iowa F.S. Inc.

PURCHASE ORDER 2031

DATE 2 /15/88

SHIP TO:
STREET 406 Elm St
LOCATION Somewhere, Iowa

☐ FOR RESALE INVENTORY

☐ FOR OVERHEAD EXPENSE

TO:
SUPPLIER Smith Wholesale Supply
ADDRESS 2695 S. 129th St
CITY, STATE Davenport, Iowa ZIP 82119

ORDERED QUANTITY	RECEIVED QUANTITY	PRODUCT DESCRIPTION	UNIT PRICE	TOTAL AMOUNT
5 lbs	5 lbs	Axle grease	.85/lb.	4.25
1	1	12 volt battery	$80.00	80.00
5	5	Fan belts	8.90	44.50

PARROTT & SONS CO., WATERLOO, IOWA EE 91

906

ORDERED BY Jake
REC'D BY Harry
DATE 3 /14/88

USING THE PURCHASE ORDER

Your employer has asked you to order repair parts from a wholesale parts distributor. The name of the parts distributor is the Leadville Wholesale Supply. The bill is charged to your business, Sunnydale Farm Supply Store. Complete the purchase order ordering the following parts using ACT-6b.

1	Alternator for truck #112	$67
2	Bearings for auger	$ 5 each
1	Universal joint for spreader #202	$12
1	Chain for spreader #202	$34
1	Muffler for company pickup	$28

Central Iowa F.S. Inc.

PURCHASE ORDER 2031

DATE ____/____/____

SHIP TO:
STREET ______________________
LOCATION ______________________

TO:
SUPPLIER ______________________
ADDRESS ______________________
CITY, STATE ______________________ ZIP __________

☐ FOR RESALE INVENTORY

☐ FOR OVERHEAD EXPENSE

ORDERED QUANTITY	RECEIVED QUANTITY	PRODUCT DESCRIPTION	UNIT PRICE	TOTAL AMOUNT

PARROTT & SONS CO., WATERLOO, IOWA EE 91

ORDERED BY ______________________

REC'D BY ______________________

DATE ____/____/____

WHEN ESTIMATING REPAIR COSTS:

LIST BROKEN OR WORN PARTS

LIST REPLACEMENT PARTS COSTS

ESTIMATE COSTS FOR LABOR

ESTIMATING REPAIR COSTS

The company you are employed by, Brooklyn Farm Supply, has some pieces of equipment in need of repair. Using the information provided below, estimate the cost of repairing the equipment:

Fertilizer spreader:

Universal joint:	
Cost of universal joint	$12.00
Time required to replace the univeral joint	2.5 hours
Spreader chain:	
Cost of chain	$34.00
Time required to replace the chain	.5 hours
Fertilizer conveyor:	
Belt replacement cost	$16.00

ESTIMATING REPAIR COSTS

Broken or Worn Parts	Parts Cost	Labor Cost	Total Cost

TOTAL ESTIMATE ________

PROBLEM AREA 5

WHAT SHOULD A MANAGER CONSIDER WHEN HIRING EMPLOYEES FOR CROP SERVICE AND SUPPLIES BUSINESSES?

Contents

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ACT-5 Personnel Manager Responsibilities....................21

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INFO-10 Building Your Resume....................27

TM-11 When Introducing the New Employee to the Business....................30

PROBLEM 5: What should a manager consider when hiring employees for crop service and supplies businesses?

INTEREST APPROACH:

You are the personnel manager of the Bay City Agricultural Supply Store. You have an opening and are seeking a person to fill a sales position in the store. This person will be selling at the store and making sales calls in the community. The store carries a complete line of agricultural supplies. This person will be expected to sell fertilizers, feeds, seed, small equipment, herbicides, pesticides, and other products used on a farm. You have advertised the position and have received the resumes for six applicants (INFO-1). You want to interview two of the applicants. Have your students review the resumes and select the two applicants that would be asked to come in for an interview for the position.

STUDY QUESTIONS:

1. Why is human resource management important for the success of your new business?
2. Why is personnel management essential for your business?
3. What are six major responsibilities which a good personnel manager should perform?
4. How can a manager identify the employee needs for his/her business?
5. How can new employees be recruited?
6. How should a manager introduce a new employee to the business?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To understand the contribution that personnel have on the success on the business. Student Learning Activity #2.

To identify the responsibilities of a personnel manager. Student Learning Activity #4.

To be able to write and interpret the contents of a job description. Student Learning Activity #5 and 7.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Understand the importance of becoming good employees. Student Learning Activity #2.

Identify working conditions of a good business. Student Learning Activity #3 and 8.

Understand the interviewing process from the employer's viewpoint. Student Learning Activity #7.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Identify characteristics of a good employee. Student Learning Activity #2.

Develop a job analysis and job description. Student Learning Activity #5 and 7.

Understand important employee benefits and procedures in the business. Student Learning Activity #8.

STUDENT LEARNING ACTIVITIES:

1. Review and discuss TM-2, 3 and 4. Invite two managers and two employees to speak to the class. Have the managers discuss their responsibilities in maintaining quality employees and what characterizes a poor employee in their business. Have the employees describe what they perceive as good and poor qualities of managers. As the managers and employees speak, have students complete ACT-5. Compile a composite list for both managers and employees based on student completion of ACT-5.

2. Review and discuss TM-6. Have each student interview an employee in a local agricultural business about the activities and responsibilities of his job using ACT-7. Based on the information each student collects in ACT-7, have them write a job description for that job.

3. Review and discuss methods of contacting potential employees (INFO-8). Have students contact employment agencies and collect information about how they advertise employee needs for businesses. Also, have students collect newspaper ads that describe employ needs (job openings) for businesses. Discuss the results of the students' efforts with the class as a whole.

4. Review and discuss how to prepare to interview a prospective employee (TM-9). Ask a manager of a local business to class and have him/her interview several students for a job. Ask class to be particularly observant of how the manager handles the interviews and the questions that he asks each student. After the interviews are complete, have students develop a resume they could use when applying for a job (INFO-10). When the resumes are complete, discuss introducing a new employee to a business (TM-11).

CONCLUSION:

Human resource management is:

The process of planning, organizing, directing, and evaluating all the activities that directly involve the employees and promotes their productivity.

Human resource management essential for the success of a new business:

The image of the business is based on the appearance and actions of the employees.

Human resources is important because of its direct and indirect effects on the success of the business.

Personnel management essential for a business:

Good employees, if not given proper treatment, can find comparable, if not better, jobs somewhere else.

If your business lacks supervisory and personnel with experience and job capabilities, you will have to train new employees yourself.

The cost of hiring and training employees at all levels is costly.

Most employees, whether or not they are represented by labor unions, continue to seek improvements in salary, employee benefits, and working conditions. All employee compensation must be based on what the business can afford. Employee policies and operating procedures should be thought out and developed carefully.

Just because a business offers competitive salaries, benefits, and good working conditions does not mean that all employees will do good work. In addition to these financial and physical compensations, employees need responsibility, the opportunity to develop new skills or some recognition of accomplishment in their jobs.

Six major responsibilities which a good personnel manager should perform are:

Hire and place new employees.

Train workers to be productive.

Compensate workers for their efforts.

Help workers maintain and improve their performance.

Evaluate workers performance.

Build relationships between workers.

Obligations of managers to their employees:

Provide a reasonably safe and suitable place for employees to perform their jobs.

Provide your employees with safe and suitable tools, machinery, and appliances to use in completing their assigned jobs.

Provide a work staff that is large enough to handle the work load.

To identify employee needs for a business, a manager should::

Identify the jobs required.

Develop a job analysis.

The process of studying the job to determine what the job consists of and what skills and experiences an employee will require to successfully complete the job requirements.

Determine which jobs need to be performed.

Determine the qualifications for each job such as: education, personal experience, physical skills, and communication skills.

Write a job description for each job in the business.

A job description is a written summary of the data collected in the job analysis. It provides a comprehensive yet concise overview of the job and it profiles what kind of person that you want to hire.

Components of job description:

General statement of what the job involves.

Where the job is located in the total organizational structure of employees.

The immediate supervisor should be identified.

Principle duties of the job.

Minimal educational, personality, and physical characteristics should be identified.

To recruit and select qualified employees. After deciding what type of employee is needed, identify the sources to advertise the position. Methods of contacting potential employees include:

Help wanted signs

Newspaper ads

Word of mouth

Competitors

Employment agencies

Employee referrals

Family and relatives

Schools

When making a decision to employee a person:

Review the applications - the application should give you information related to the applicants previous employment, education and personal data. If the applicant seems qualified, set up an interview.

Interview the applicants - the interview allows you to clarify information on the application, evaluate the applicant's appearance, composure, and communication skills. The interview will allow you to decide if the applicant is suited for the job, and allows you to tell the applicant more about the job.

Prepare to interview a prospective employee:

Review the application first.

Prepare the questions to be asked in advance.

Make the applicant comfortable and at ease.

Don't dominate the conversation - guide it.

Listen carefully.

Ask open enough questions and get the applicant to talk.

Treat all applicants equally.

Don't let the interview drag unnecessarily, keep it businesslike.

Check the references of the applicant.

Talking to the former employer may give an insight into the qualifications of the applicant.

Determine the most qualified applicant and offer the position to the applicant.

When introducing the new employee to the business:

Welcome the new employee when they arrive and provide a company handbook if available.

Tour the facilities and introduce co-workers if appropriate.

Give a brief description of the company and some of its history.

Review business procedures:

Working hours

Where to report to work

How to report the amount of time worked

Rest periods

Absence from work and how to report absences

Employment records

Pay periods

Safety and accident prevention

Use of the telephone

Complaint procedures

Review business benefits:

Vacations

Holidays

Group life insurance

Medical benefits

Parking

Training programs

Personal leave

Sick leave

Christmas bonus, etc.

Discuss special services:

Credit union

Company magazines

Employee purchases

Education plans

Sports team or activities

EVALUATION:

Upon completion of this lesson, students will be able to:

Define human resource management.

Identify six major responsibilities which a good personnel manager should perform.

Be able to read and interpret the content of a job description.

Identify qualities of a good employee.

Understand employee characteristics which are important to consider when hiring a new employee.

OPTIONAL LEARNING ACTIVITIES:

Divide the students into teams of 5-10. Select a manager for each group. Identify several jobs which can be completed in a 20 minute period. Provide jobs to be completed for the manager and have the manager distribute work assignments to his/her employees. Compare results and problems encountered in each of the groups during class discussion.

REFERENCES:

Managing Human Resources. The National Center for Research in Vocational Education, Ohio State University, 1960 Kenny Road, Columbus Ohio 43210, Unit 12, Level 1,2,3. (PACE). Program for Acquiring Competence in Entrepreneurship, 1983.

SAMPLE RESUMES

LEROY WRAGGE

Permanent Address
Route 1, Box 63A
Preston, Iowa 52069
(319) 689-6718

SUMMARY OF QUALIFICATIONS

- **Plant and Soil Science** - Knowledge and experience of key aspects of plant and soil science including soil science, weed identification and management, and chemical use.
- **Entomology** - In-depth knowledge and field experience in identification and control of insects plus graduate level course work in biological control and economical entomology.
- **Reliability** - Track record of working independently without close supervision and to accomplish defined objectives on-time and within budget.
- **Interpersonal Relations** - Excellent skills in working with customers and clients especially when communicating technical findings and recommendations.
- **Organization** - Capability to schedule, direct, and accomplish many tasks as demonstrated by my graduation from I.S.U. in eight semesters with a double major having self-financed my college education.

EDUCATION

Bachelor of Science, Iowa State University, Ames: May 1987.
Double Major: Entomology and Pest Management

Activities: Iowa State Entomology Club - Vice President; Ag Council - Rep.; FFA; and 4-H.

Self financed 80% of college education through employment.

WORK EXPERIENCE

May to August 1986. Crop Scout, Pest Management Company, Lincoln, NE.
Surveyed over 2400 acres covering six farms on a weekly basis. Took soil samples and analyzed soil tilth including nutrient values plus insects, weed, and disease problems. Work independently advising farmers of findings and recommending remedial actions.

May to August 1985. Crop Scout, Iowa State Area Extension Office, Davenport, IA.
Scouted corn, soybean, and alfalfa fields for insects, weeds, and diseases. Responded to requests for assistance and entered data via telephone modem to main computer facility.

1984 to 1986. Research Laboratory Technician, Genetics Department, I.S.U., Ames, IA.
Assisted in research concerning cytogenetics employing electrophoresis to study enzyme polymorphism. In green house, planted, mixed soil, and recorded study results.

Family Farm, Preston, IA.
Worked in all aspects of 320 acre crop and livestock operation. Cultivated, planted, applied chemicals, and harvested various crops.

PERSONAL DATA

Birthday: April 2, 1965
Marital Status: Single
Health: Excellent
Interests: Fishing and Sports

REFERENCES

Dr. Earle S. Raun
Professional Entomologist
Pest Management Company
Lincoln, NE 68506
(402) 489-5796

Gene Vincent
Area Crop Specialist
R. R. 1, Box 149A
Bettendorf, Iowa 52722
(319) 332-4816

Dr. Reid Palmer
USDA Research Scientist
G-310 Agronomy Bldg.
Iowa State University
Ames, Iowa 50011
(515) 294-7378

RUSSELL ANDERSON

PERMANENT ADDRESS
R.R. #2
Manchester, Iowa 52057
Ph. (319) 927-5429

EDUCATION:

IOWA STATE UNIVERSITY, Ames, Iowa 50011
Bachelor of Science, 1987
Agricultural Education, 3.80/4.00

WEST DELAWARE COMMUNITY HIGH SCHOOL
701 New St., Manchester, Iowa 52057
Diploma, 1983

WORK EXPERIENCE:

GROWMARK Inc./FS, Bloomington, Illinois, 61702-2500 (Summer 1987)
Summer Intern - Operation and maintenance of equipment. Surveyed and advised clients.

North Linn Community High School, Coggon, Iowa, 52218 (Spring 1987)
Student Teacher - Planned, organized and conducted educational activities; coordinated and advised youth group activities, FFA.

Ascheman Associates Consulting, Des Moines, Iowa 50322 (Summer 1986)
Research Assistant/Crop Scout - Research plot maintenance including pesticide application, collecting data, and harvesting. Observed, diagnosed, and reported crop deficiency symptoms.

Stauffer Seeds Inc., Lone Tree, Iowa 52755 (Summer 1985)
Summer Intern - Warehouse operations, supervision of detasseling crews and contractors and liaison between the company and seed growers.

Family Farm, Manchester, Iowa 52057
600 acre grain and livestock farm operation.

ACTIVITIES AND HONORS:

Iowa State University
- Agricultural Education Club
  - President; Vice-President;
  - Membership Committee, Chairperson;
  - Midwest Regional Ag Ed Conclave Committee
  - Program and VEISHEA Committee
- Alpha Zeta Agricultural Honorary Fraternity
  - Program and Pledge Committee
- Gamma Sigma Delta Honorary Society of Agriculture
- Golden Key National Honor Society
- Phi Kappa Phi National Honor Society
- Dean's List (8 semesters)
- Scholarships
  - Farmland Industries Inc.
  - Carl Sandage Scholarship
  - Continental Grain Company
- Residence House Social Chairperson
- Intramural Athletics

West Delaware Community High School
- Future Farmers of America
  - President; Secretary
  - Iowa FFA Degree
- National Honor Society
- Varsity Athletics
- 4-H County Council
- 4-H Club President
- Concert Choir
- Swing Choir
- American Legion Boys State

REFERENCES:

Dr. Robert A. Martin, Associate Professor of Agricultural Education,
217 Curtiss Hall, ISU, Ames, Iowa 50011 (515) 294-0896

Dr. Robert E. Ascheman, Ascheman Associates Consulting,
2921 Beverly Drive, Des Moines, Iowa 50322 (515) 276-7371

Mr. Clarence Hasz, General Manager, Carroll Service Company
Rt 64 & W. Lanark Ave., Lanark, Illinois 61046 (815) 493-8421

RICHARD DRAHOTA

PERMANENT ADDRESS
R.R. #3 Box 91
Kalona, Iowa 52247
(319) 656-2309

EDUCATION

Degree: Bachelor of Science, May 1986
Curriculum: Agricultural Studies - Farm Operation
Academic: 3.13/4.00 Grade Point

COLLEGE INFORMATION

Activities:

Alpha Gamma Rho Social/Professional Fraternity:
- Steward, Assistant Pledge Educator, Activities Chairman, Varieties Cast Member, Pledge Class Officer, various committees.

Student Alumni Association:
- Student Ambassador Co-Chair, Student Ambassador Area Coordinator, Cyclone Guide.

ISU Pep Council:
- "Cy" - Iowa State University mascot.

Greek Week:
- Student Advisor, Internal Events Co-Chair, Barbeque Co-Chair.

University Orientation Committee.
Farm Operation Club, Social Chairman.
European Agricultural Travel Course, 1985.

Honors/Awards:

Cardinal Key, Alpha Zeta, Alpha Gamma Rho Outstanding Leadership Award Recipient.

PRE-COLLEGE INFORMATION

Washington High School, Washington, Iowa 52353 Diploma, 1982

Activities:

4-H:
- State Council Member, County Council Co-Chair, Club President, County Leadership Award and Achievement Award Recipient.

Future Farmers of America:
- Chapter President, Chapter Secretary, Member of the Year, Star Greenhand.

Varsity Football, Track, Baseball.

WORK EXPERIENCE

Cyclone Aide, Iowa State University; assisted with new student orientation, Summer 1984.

Counselor, 4-H Junior Camp; supervised campers during week-long 4-H camp, Summers of 1983 and 1982.

Family farm operation; 450 acre farm with corn, soybeans, hogs, and cattle.

REFERENCES

Julie Larson, Coordinator of Special Projects, Iowa State University Alumni Association, Memorial Union, Ames, Iowa 50011 (515) 294-8488

Margaret A. Healy, Coordinator, Student Affairs Research Office, 44 Carver Hall, Iowa State University, Ames, Iowa 50011 (515) 294-2232

James R. Frier, Washington County Extension Director, 209 South Marion Avenue, Washington, Iowa 52353 (319) 653-4811

Nancy A. Irlbeck, Academic Advisor, 206 Curtiss Hall, Iowa State University, Ames, Iowa 50011 (515) 294-6924

DOUGLAS LESSER

DEGREE: Bachelor of Science, May 1981

CURRICULUM: Animal Science

PERMANENT ADDRESS: Powers Lake, N. Dakota 58773
(701) 464-5225

PERSONAL DATA:
Born: July 25, 1957; Height: 6'0"; Weight: 180 lbs;
Health: Excellent
Interests: Rodeoing, Boxing, Tennis, Downhill Skiing, Water Skiing

PRE-COLLEGE INFORMATION:
Powers Lake High School, Powers Lake, North Dakota 58773
Activities:
4-H: 4-H Club of North Dakota, 4-H Livestock Judging
FFA: FFA-North Dakota, Secretary, Vice President, FFA Crops Judging and Livestock Judging, Delegate to State Convention, Top Salesman Award, Star Chapter Farmer, North Dakota State Farmer
Sports: Basketball and Football
Honors And Awards: Outstanding Teenager of America, Outstanding Ag. Student

UNIVERSITY INFORMATION:
Iowa State University: 1977 - 1981; Grade Point: 3.00
Activities:
Rodeo Club - Secretary 1979, Vice President 1980, Co-Chairman of the El Toro Contest 1979, Assistant Chairman of Cyclone Stampede 1980, ISU Traveling Rodeo Team, Boxing Club, Intramural Basketball and Volleyball

WORK EXPERIENCE:
Family Livestock and Crop Farm to 1975
Clinton Lindberg Farm, Powers Lake, North Dakota, Fall 1975 - Fall 1976
Anderson Trucking, Powers Lake, North Dakota, Fall 1976 - Winter 1976
Nobel Oil Drilling Co., Powers Lake, North Dakota, Winter 1976 - Fall 1977
Large Animal Resources, Ames, Iowa Fall 1977 - Spring 1978
National Animal Disease Center, ISU, Ames, Iowa Spring 1978 - Present

REFERENCES:
Dr. Emmit Haynes, 119 Kildee Hall, Iowa State University, Ames, Iowa 50011.
(515) 294-3161
Dr. George Brant, 119 Kildee Hall, Iowa State University, Ames, Iowa 50011.
(515) 294-3161
Dr. Charles W. Beall, National Animal Disease Center, Dayton Road, Ames, Iowa 50010.
(515) 232-0250, Ext. 439
Mr. Clinton Lindberg, Powers Lake, North Dakota 58773. (701) 464-5537

GARY MARKS

ADDRESS

Rural Route 1
Wellsburg, Iowa 50680
(515) 847-2781

CAREER OBJECTIVE

Sales Representative - Agricultural Products - seed, feed, agricultural chemicals, fertilizer, or animal health products.

EDUCATION

Bachelor of Science Degree - May 1986
Iowa State University, Ames, Iowa
Major: Agricultural Business
G.P.A.: 3.36/4.00

WORK EXPERIENCE

Dow Chemical U.S.A., Des Moines, Iowa - Summer 1985
Position: Agricultural Products Summer Intern
Responsible for generating sales of insecticide for European corn borer treatment. Duties included creating dealer/farmer awareness on European corn borer, scouting to determine insect activity, and establishing product effectiveness with third-party influences.

DeKalb-Pfizer Genetics, Ames, Iowa - August 1983 to May 1985
Position: Part-time Assistant Area Clerk
Responsible for computer data entry and maintaining dealer accounts. Other duties included editing, filing, and balancing monthly statements.

National Cattleman's Association and Cowbelles' Organization
Position: County and District Beef Queen - June 1982 to August 1983
Responsible for representing beef industry and promoting the sale and consumption of beef. Duties included giving educational presentations, writing articles, and attending fairs.

FARM BACKGROUND

Raised on a 500-acre north central Iowa farm. Assisted with crop production, hog and cattle operation.

HONORS AND ACTIVITIES

Alpha Zeta Agricultural Honorary (secretary, banquet chairperson); Agricultural Business Club (VEISHEA Food Stand Chairperson); National Agri-Marketing Association; Top 2% of Sophomore Class - College of Agriculture - 1983; Dean's List - 1983; intramural sports; 9-year 4-H Member; 4-H County Council.

REFERENCES

Gary Copperstone, District Territory Manager, Dow Chemical U.S.A., West Des Moines, Iowa 50265. (515) 224-4792.

Paul Doak, Academic Advisor, Department of Economics, 174C Heady Hall, Iowa State University, Ames, Iowa 50011. (515) 294-5436.

Doug Timmons, Division Manager, Faulkner Ag Center, R.R. 3, Ackley, Iowa 50601. (515) 847-2513.

WARREN LARSON

Permanent Address
R.R. 4, Box 73
Estherville, Iowa 51334
Phone: (712) 362-2014

EDUCATION

Iowa State University, Ames, Iowa May 1988
Bachelor of Science, Agricultural Education
Current GPA 3.81

Iowa Lakes Community College, Estherville, Iowa May 1986
Associate of Arts, Agriculture
GPA 3.73

*Financed 100% of college expenses through employment and scholarships

WORK EXPERIENCE

GROWMARK, Incorporated, Bloomington, Illinois May 1987
INTERN. Territory Analysis Project. Conducted 342 farm visits for analysis surveys. Computerized data from surveys. Presented oral and written reports to sales staff and corporate office (assigned to Poweshiek-Jasper Farm Service Company, Grinnell, Iowa).

Iowa Lakes Community College, Estherville, Iowa Summer 1986
TUTOR/COUNSELOR. Upward Bound Summer Program. Tutored math and journalism to disadvantaged students. Counseled 44 students on a 24 hour basis.

Stall's Farm and Home, Estherville, Iowa Aug. 1983-Jan. 1986
RETAIL SALES AND SERVICE. Worked in Customer Service, Sales, Inventory Control, daily banking transactions, balancing cash drawer, posting accounts receivable, pricing and stocking merchandise. Licensed as a chauffeur. Operated company truck and trailer for transportation of merchandise.

Farming Experience
Worked in production of corn, soybeans and market hog enterprises on 700 acre family farm.

Emmet County Fair Maintenance 1985-86
Set up, maintained, and dismantled fairground equipment, assisted with crowd control and public service.

ACTIVITIES AND HONORS

Scholastic Achievements and Awards:

ISU College of Agriculture Dean's List	Fall 1986 & Spring 1987
Accepted with honor and award to ISU	August 1986
Charter member, Alpha Tau Alpha Honorary Agricultural Education Fraternity	November 1987
Graduated Magna Cum Laude, ILCC	May 1986

Scholarships

Transfer Development Scholarship in Agricultural Education	1987
Monsanto Transfer Student Scholarship	1986
United Central Bank Scholarship	1984

College Activities:

Iowa State University	
Agricultural Education Club	1986-88
Vice President	1987
Publicity Committee Chairman	1986
Agriculture Education Department Recruitment Committee member	1986-87
Iowa Lakes Community College	
Student Senator	1985-86
Careers in Agriculture and Science Exploration Club member	1985-86

High School Activities

Estherville F.F.A. Chapter	1980-84
President, Vice President and reporter. Washington D.C. Leadership Conference delegate State awards in Creed Speaking, Parliamentary Procedure and Program of Activities contests	
National Honor Society, president	1983
Vocational Industrial Club president	1983-84

Other Community Activities

Volunteer at county fair
Voice of Democracy contest speaker, second place
4-H County Council member
4-H youth camp counselor
Eight year 4-H member

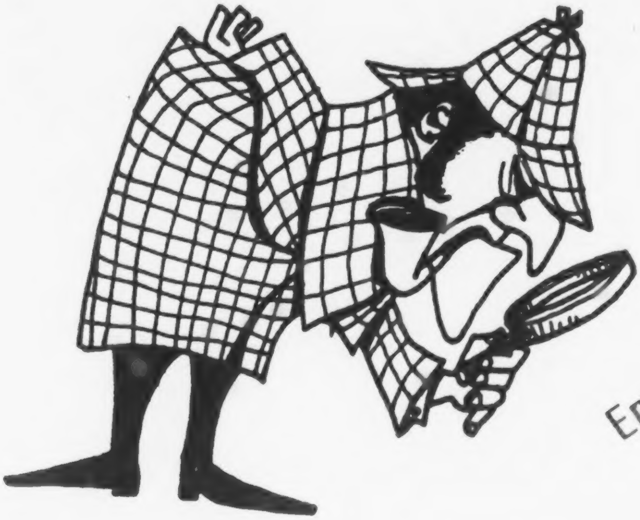
REFERENCES

Available upon request.

HUMAN RESOURCE MANAGEMENT IS:

The process of planning, organizing, directing, and evaluating all the activities that directly involve the employees and promote their productivity.

Indicators of a Good Business



Employees are helpful

air prices

The business is neat and clean for customers

Usually have the products I need

Employees are friendly

The employees here are concerned about customers

SIX RESPONSIBILITIES OF GOOD PERSONNEL MANAGERS:

1. Hire and place new employees
2. Train workers to be productive
3. Compensate workers for their efforts
4. Help workers maintain and improve their performance
5. Evaluate workers performance
6. Build relationships between workers

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PERSONNEL MANAGER RESPONSIBILITIES

List below the methods used by managers to maintain quality employees and what they consider good and bad qualities of employees.

Managers maintain quality employees by:

Good employee qualities are:

Bad employee qualities are:

GOOD AND POOR PERSONNEL MANAGER QUALITIES

List below the good and poor manager qualities shared by the employee speaker.

Good manager qualities:

Poor manager qualities:

DETERMINING BUSINESS EMPLOYEE NEEDS

IDENTIFY JOBS REQUIRED
IN THE BUSINESS

COMPLETE A JOB ANALYSIS

WRITE A JOB DESCRIPTION
FOR EACH JOB

DEVELOPING A JOB DESCRIPTION

During your interview with the agricultural business employee that you selected, collect information on the following points. When you have completed collecting this information, write a job description for the job.

1. What does the job involve?

2. Where is the job situated in the business organizational structure?

3. Who is the immediate supervisor over the job?

3. What are the duties of the job?

5. What are the minimum education requirements?

What are the minimum personality requirements?

What are the minimum physical requirements?

METHODS OF CONTACTING POTENTIAL EMPLOYEES

Method	Advantages	Disadvantages
Help Wanted Signs	Inexpensive and may get wide exposure to those who live near your business.	Doesn't describe job in any way and may bring in those with few qualifications.
Newspaper Ads	Many people are likely to see them; may describe job in an attractive way; may direct applicant to respond in person, by telephone, or by mail.	May not screen out unqualified persons. May bring in more applicants than you can efficiently handle.
Word of Mouth	Inexpensive.	Doesn't guarantee any results. May bring in unqualified applicants.
Competitors	Applicants may already be trained and understand the business.	May cause bad feelings between you and your competitors.
Employment Agencies	Will screen applicants and send the most qualified.	Expensive; and may try to "sell" you on someone you don't want.
Employee Referrals	Since your employees already know you and your business, they may bring in a qualified applicant. This is an inexpensive method.	Friends of employees may be recommended without regard to qualifications; may be difficult to turn down without hurting feelings.
Family and Relatives	Because they are related to you, they may take more of an interest in your business. Is also an inexpensive method.	May not be qualified; may create conflict within the family.
Schools	Applicants may already be trained; may be eager to work; usually inexpensive.	Applicants may lack experience.

HOW TO PREPARE TO INTERVIEW A PROSPECTIVE EMPLOYEE:

1. REVIEW THE APPLICATION FIRST.
2. PREPARE THE QUESTIONS WHICH YOU WOULD LIKE TO ASK IN ADVANCE.
3. MAKE THE APPLICANT FEEL COMFORTABLE AND AT EASE.

4. DON'T DOMINATE THE CONVERSATION - GUIDE IT.
5. LISTEN CAREFULLY.
6. ASK OPEN-ENDED QUESTIONS TO GET THE APPLICANT TO TALK.
7. TREAT ALL APPLICANTS EQUALLY - THERE ARE FEDERAL LAWS THAT PROHIBIT DISCRIMINATION IN HIRING BASED ON RACE, COLOR, NATIONAL ORIGIN, SEX AND AGE.
8. DON'T LET THE INTERVIEW DRAG UNNECESSARILY, KEEP IT BUSINESSLIKE.

BUILDING YOUR RESUME

A resume is the first tangible step in the job search. Following are some areas to consider when approaching this task:

1. There are no hard and fast rules. An effective resume reflects your "uniqueness" as an individual. IT IS YOUR STORY.

2. Three major parts to a college resume:

   a. Education

   b. Experience - work and college/high school activities

   c. Personal

3. Education

   a. Academic honors

   b. Schools attended

   c. High school information

4. Work experience - may be short here

   a. Include part-time and full-time (of any length), i.e. probably 2 weeks and longer

   b. Put time period, e.g. Summer 1978 or December 1977-June 1978, etc.

   c. Put most recent first or most important first

   d. Indicate your job title (if any) and a summary of responsibiities. Example:

   Central Iowa Bottling Company, Ames, Iowa. (June 1978 to August 1978) Delivery person: delivered pop, serviced vending machines, and maintained customer accounts.

e. Farm background. Put some descriptions on type of farm. Example:

   Grew up on a 480 acre farm. Experiences included work with crops, hogs, and beef cows.

f. Student activities - high school

   (1) Optional

   (2) 4-H/FFA

   (3) Show leadership responsibilities

5. Personal

   a. Areas to consider including:

      Date of birth
      Height
      Weight
      Health
      Marital status
      Special interests/hobbis

   b. Permanent address and telephone

   c. References:

      Two view points

      If you include, be detailed (name, position, address and telephone number

      No magic number on how many (three is a good figure)

      Should be people who knew you during the last few years

      Combination of academic and work

d. Employment objective/Position desired/Job Objective, etc.

If included, be specific

If can't be specific, consider leaving out

e. Photograph (optional)

6. Miscellaneous

a. Date resume prepared

b. Date available for employment

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WHEN INTRODUCING THE NEW EMPLOYEE TO THE BUSINESS:

WELCOME THE EMPLOYEE

TOUR THE FACILITIES

INTRODUCE CO-WORKERS

GIVE A BRIEF DESCRIPTION OF THE BUSINESS

REVIEW BUSINESS PROCEDURES

REVIEW BUSINESS BENEFITS

DISCUSS SPECIAL SERVICES

PROBLEM AREA 6

WHAT DOES AN EMPLOYEE NEED TO KNOW ABOUT FERTILIZER AND CHEMICAL APPLICATION SAFETY?

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LESSON 6: What does an employee need to know about fertilizer and chemical application safety?

INTEREST APPROACH:

Obtain the video entitled, "Safe Handling of Pesticides" through your county extension director or from the Iowa State University Film/Video Library. Specify the format--1/2 UHS or 3/4 U-MATIC. Have the class discuss view the video. After viewing, discuss the do's and don'ts of storing and handling pesticides and other agricultural chemicals.

STUDY QUESTIONS:

1. What safety measures are important to an employee when working with chemicals?
2. What terms are important to know?
3. What are the various types of chemicals handled by a seed, chemical, and fertilizer dealer?
4. What are the various formulations of chemicals and their meanings?
5. What are the methods used in application of chemical treatments?
6. What factors determine application rates?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

For human relation and commicative skills. Student Learning Activity #3.

To apply general principles to specific situations. Student Learning Activity #1.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities:

Strengthen the students' ability to follow written directions. Student Learning Activity #3.

Improve the students' ability to write legibly. Student Learning Activity #1.

Improve the students' ability to follow oral directions. Student Learning Activity #3.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

Distinguishing relevant from irrelevant information, claims, or reasons. Student Learning Activity #3

Recognizing logical inconsistencies in a line of reasoning. Student Learning Activity #4.

STUDENT LEARNING ACTIVITIES:

1. Review and discuss TM-1, 2, 3, 4, 5, and 6. Provide each student with a copy of ACT-7. Have students select a famrer in the community or their father and have them survey that person following the questions on ACT-7. Summarize and discuss the students results. Invite several chemical dealers in the community to visit with the class about their observations of how farmers follow recommended safety practices when applying chemicals on their farms. Compare their comments with the results of the student surveys.

2. Have students complete the crossword puzzle in ACT-8.
3. Bring containers of insecticides, fungicides, herbicides, pesticides, plant regulators, defoliants, and dissicants to class. Be sure to have among the chemicals water soluable concentrates, emulificiable concentrates, flowables, wettable powders, granules and pellets. Review and discuss TM-9 and 10. Following the directions on the containers, demonstrate how to properly mix each type of chemical.
4. Assign students specific agricultural businesses in the community. Have then visit the businesses and list the chemical products sold by those businesses. Have students indicate the type and use of each chemical on their lists. Compile a composite list from the students lists. Duplicate this list and share with each member of the class.
5. Bring several applicator trucks to class. Review and discuss TM-11, 12, and 13. Demonstrate how the applications are changed to broadcast, direct-spray, and band spray chemicals. Divide students into groups of two and have them set the applicators to provide the above methods of application.

CONCLUSIONS:

Pesticides are safe to use, provided common-sense safety precautions are practiced and provided they are used according to the label instructions. This especially means keeping them away from children and illiterate or mentally incompetent persons.

The first rule of safety in using any pesticide is to read the label and follow the directions and precautions printed on it. If the label calls for it, wear the appropriate protective clothing and equipment.

Carefully read the label directions and current official state recommendations of the Cooperative Extension Service. This information can be obtained from your local county agent. It's always a good idea to wear rubber gloves when mixing pesticides and to stand upwind of the mixing container. Handle the pesticides in a well-ventilated area. Avoid dusts and splashes when opening containers or pouring into the spray apparatus. Do not use or mix pesticides on windy days. Measure the quantity of pesticide required accurately, using the proper equipment. Overdosage is wasteful; it will not kill more pests, it may be injurious to plants, and it may leave an excess residue on harvested crops. Make certain that equipment is calibrated correctly and is in satisfactory working condition. Apply only at the recommended rate, and, to minimize drift, apply only on a calm day. Do not contaminate feed, food, or water supplies.

Do not mix pesticides in areas where there is a chance that spill or overflow could get into any water supply. Clean up spills immediately. Wash pesticides off skin promptly with plenty of soap and water and change clothes immediately if they become contaminated.

Dispose of empty containers immediately by properly burying or burning. Consult local officials concerning legal disposal of containers. Keep pesticides out of mouth, eyes, and nose. Do not use your mouth to blow out clogged hoses or nozzles. Observe precisely the waiting periods specified on the label between pesticide application and harvest. Clean all equipment used in mixing and applying pesticides according to recommendations. Do not use the same sprayer for insecticide and herbicide applications.

After handling pesticides, wash the sprayer, protective equipment, and hands thoroughly. And, if you should ever become ill after using pesticides and believe you have the symptoms of pesticide poisoning, call your physician and take the pesticide label with you. This situation is highly unlikely, but it's always good to know about in an emergency.

"Safety is a state of mind" is an old rule used in industrial safety engineering. But pesticide safety is more than a state of mind. It must become a habit with those who handle, apply, and sell pesticides--and certainly with those who supervise those who do. You can control pests safely if you use pesticides properly.

Ways toxic chemicals enter body:

- Absorption through the skin
- Swallowing or gastrointestinal absorption
- Absorption by breathing

Three classes of chemical hazards (safety rules):

- Hazards to person's safety:
    - Never smoke while using chemicals.
    - Always wash hands and face after spraying or dusting.
    - Change clothing immediately.
    - Avoid contact with skin.
    - Wear goggles, respirator, gloves, and long sleeve shirt.
    - Avoid applying chemicals in high wind.
    - Burn empty containers away from buildings and avoid breathing any smoke from fire.
    - If illness occurs, consult a doctor immediately.
- Hazards of use:
    - Do not permit an irresponsible employee or any careless person to handle, mix, or apply chemicals.
    - Propery identify insect, weed, or pest to be controlled.
    - Measure ingredients accurately and mix them thoroughly.
    - Mix only what is needed for immediate use.

Use chemicals only on the crops for which they are recommended.

Be sure sprayer or applicator is in good condition and operating properly.

Apply chemcials only at times recommended on the label.

Guard against drift of sprays or dusts.

Cover all food and water containers when treating an area around livestock.

Consider wildlife as well as humans, domestic animals, and plants when applying agricultural chemicals.

Hazards of storage:

Always store chemicals in the original containers with the label attached and the lid closed tightly.

Keep all chemicals out of reach of children and pets.

Keep chemicals away from livestock feed.

Never lend a portion of a chemical to another person in an unmarked or unlabeled container.

Terms and defintions:

Terms related to safe handling of chemicals are presented in ACT-6.

Types of chemicals:

Pesticide: any substance or mixture of substances used for:

Preventing, destroying, repelling, or otherwise controlling insects affecting plants, animals, and humans (insecticides).

Preventing, destroying, repelling, or otherwise controlling fungi (fungicides).

Preventing, destroying, repelling, or otherwise controlling weeds (herbicides).

Controlling rats, mice, or other rodents (rodenticides).

Antibiotics: any chemical or chemicals produced by living organisms that help alleviate or control bacterial diseases:

Plant regulators: any substance or mixture of substances that affect, through physiological action, growth rate, or other behavior of plants.

Defoliants: any substance or mixture of substances used to cause leaves or foliage to drop from plants. Generally used to facilitate harvesting.

Dessicants: any substance or mixture of substances used to artificially accelerate the drying of plant tissues (may or may not cause leaf drop).

Herbicide formulations:

Water-soluble concentrates:

Readily dissolves in water

No further agitation required once dissolved

Emulsifiable concentrates:

Readily mixes with water

Mild agitation may be required to maintain emulsion

Flowables:

Finely ground solids or semi-solids put into a liquid that makes the mixture form a suspension.

Wettable powders:

Insoluble or only slightly soluble in water or oil

Particles must be kept in suspension by mechanical or jet agitation during spraying operation.

Granules and pellets:

Can be formulated with most herbicides

Difficult to apply at low rates

Timing of application.

Preplant:

Applying herbicides before the crop is planted.

Preemergence:

Applying chemcials before the crop or weeds emerge.

Postemergence:

Applying chemicals after the crops or weeds emerge.

Methods of application of chemical treatments:

Broadcast: Covers the entire area or field at a uniform rate.

Row or band: Places chemicals directly over the rows.

Spot: Places chemicals in limited areas infested with weeds.

Directed sprays: Places spray directly on a certain part of the plant.

Factors determining applicaton rates:

Climate:

- Temperature
- Wind
- Moisture

State of plant growth:

Condition of plant

Texture of soil

Organic matter of soil

Size and condition of crops

Size and condition of weeds

Available moisture

Height of sprayboom

EVALUATION:

Upon completion of this lesson, students will be able to:

Describe safety measures an employee should follow when working with agricultural chemicals.

Define agricultural chemical terms.

Identify types of chemicals and their uses.

Describe various chemical formulations.

Describe how agricultural chemicals are applied.

Describe factors that determine application rates.

REFERENCES AND INSTRUCTIONAL MATERIALS:

The Pesticides Book, George W. Ware (W. H. Freeman and Company, San Francisco, California.

Program Planning Guide in Agricultural Supplies and Services, Welton and Marks, School of Agriculture, Southern Illinois University, Carbondale, Illinois.

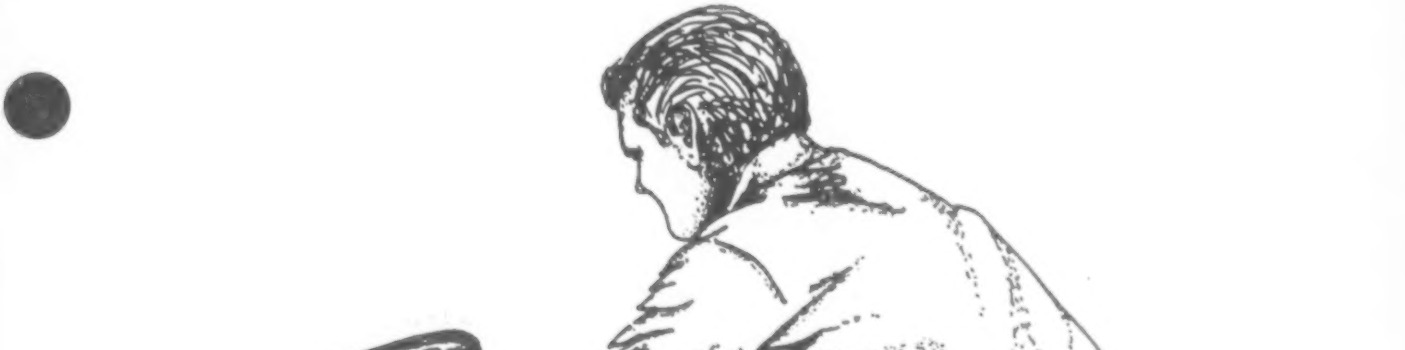
Agricultural Business and Management, Iowa Curriculum Assistance Systems, Iowa State University, Ames, Iowa.

Kansas Vocational Agriculture Student Material, Kansas State University, Manhattan, Kansas.

Vocational Agricultural Service, College of Agriculture, Ohio State University.

Illinois Vocational Agriculture Service, College of Agriculture, University of Illinois, Urbana-Champaign, Illinois.

Safety Is
A
State of Mind



When Handling Chemicals

Wear appropriate protective clothing and equipment

Wear rubber gloves

Handle in well ventilated area

Avoid dusts and splashes

Use recommended amount

Correctly calibrate applicator

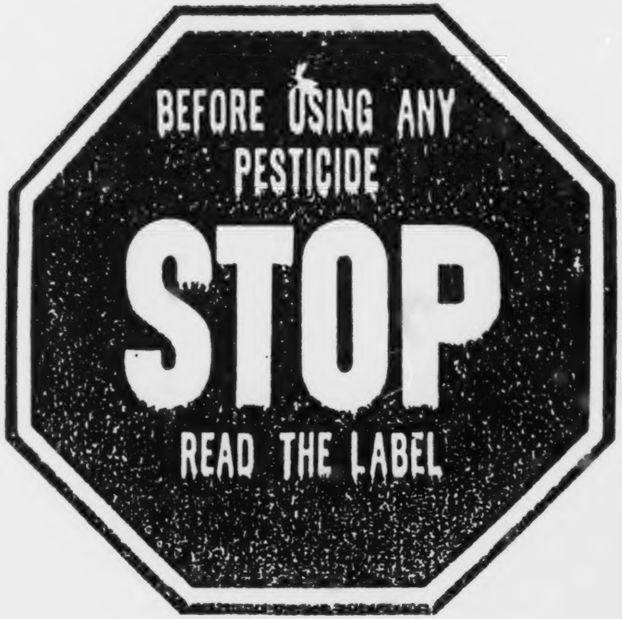
Clean up spills immediately

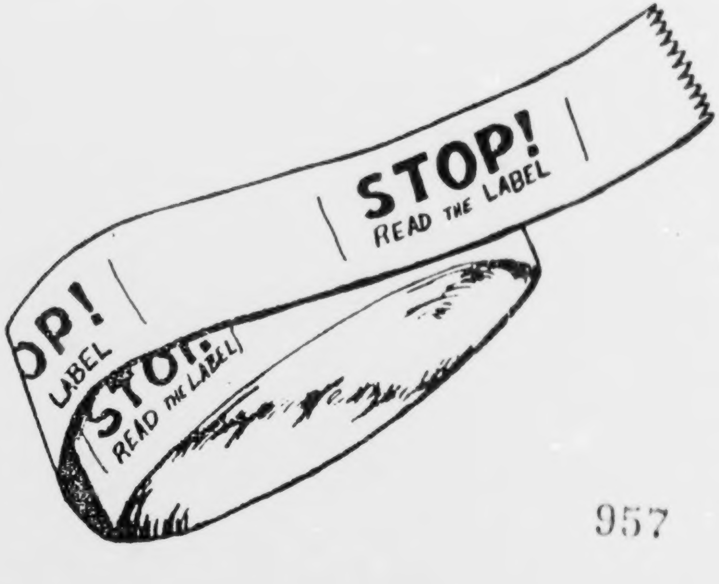
Wash chemical off of skin promptly

CSS-6

SAFETY PRECAUTION BEFORE CHEMICAL USE

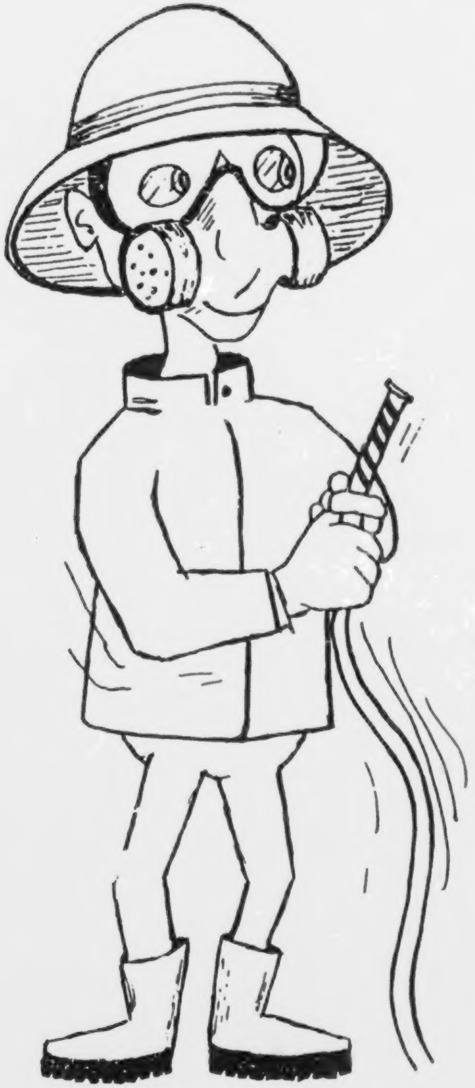
13

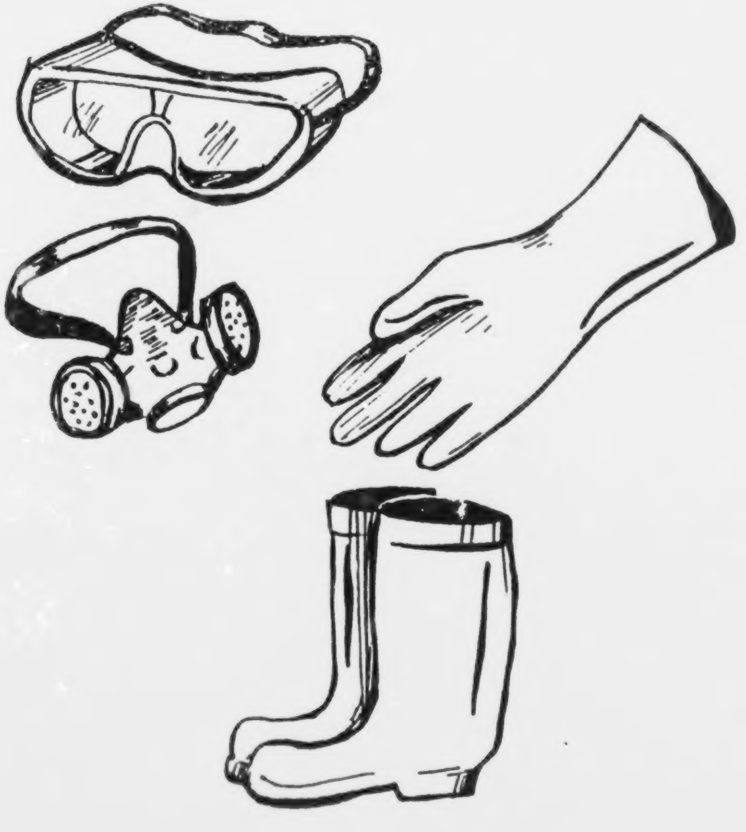

BEFORE USING ANY PESTICIDE
STOP
READ THE LABEL


STOP!
READ THE LABEL
STOP!
READ THE LABEL
OP!
LABEL

TM-3

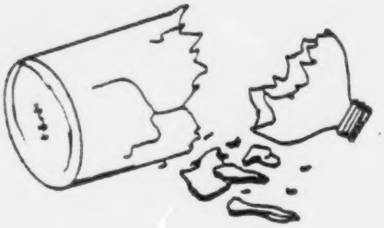
Proper Spray Clothing



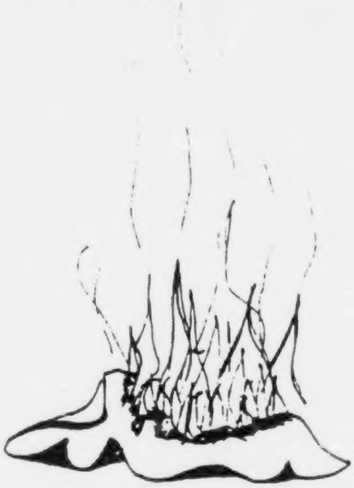


DISPOSAL OF EMPTY CONTAINERS

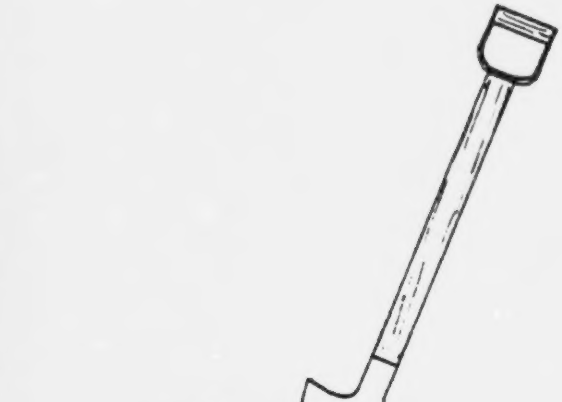
BREAK & BURY



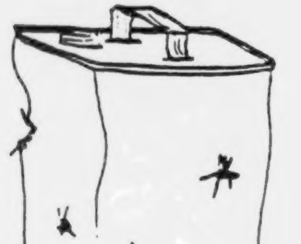
BURN



BURY



PUNCTURE & BURY



Classes of Chemical Hazards

Hazards to person's safety

Hazards of use

Hazards of storage

SAFETY SURVEY OF ON-FARM CHEMICAL APPLICATIONS

Visit with the farmer you have selected and ask the following questions about their safety procedures while using chemicals. Write their responses in the spaces provided for each question.

1. Do you read the labels on the chemical product you are using each time that you use it?

2. Do you follow the directions provided for using the chemical?

3. Do you always wear appropriate protective clothing and equipment when working with agricultural chemicals? If no, why not?

4. Do you work with agricultural chemicals in a well ventilated area? If not, where do you work with them and why?

5. As you work with chemicals, do you avoid dusts and splashes? If yes, what procedures do you follow to avoid them?

6. When you use chemicals, do you calibrate your applicator and test to see that the proper amounts of the chemical are being applied? If yes, how to you check your calibration?

7. Do you clean-up spills immediately? If yes, how do you clean them up?

8. If you get chemicals on your skin, do you wash that area of your body promptly? If yes, explain how you wash.

9. Do you dispose of empty chemical containers? If yes, how and where?

10. Do you wash your applicator after applying chemicals? if yes, how?

Agricultural Chemical Crossword Puzzle

DOWN

1 Takes place when material has gained entry into the bloodstream.

2 Degree of poisonousness of a substance.

4 Device which controls working spray pressure.

6 To prevent nozzle dripping when spray is cut off.

7 Part of spray system which extends out over the field and provides a place for nozzle attachment.

9 Substance which if introduced into an organism in relatively small amounts may chemically produce an injurious or deadly effect.

10 Tank which stores the spray solution and agitator.

11 Site of action on an agent or the exact area of contact

13 Inhaling or absorbing of relatively large amounts of chemicals in a short period of time.

17 A 50 mexh or coarser strainer attached to the suction line in the tank.

19 To prevent overdosage when sprayer is stopped.

ACROSS

1 Device in the spray tank necessary to keep the spray material uniformly mixed.

3 A hose to return spray solution under pressure to jet agitator in spray tank.

5 Stops flow of spray solution to boom.

8 Inhaling or absorbing relatively small amounts of chemicals over a long period of time.

12 The practical certainty that injury will not result from the use of given substance.

14 Line which pulls the spray solution back to tank when shut-off.

15 A device which controls the amount, uniformity, and thoroughness a chemical is applied safely.

16 Angle of spray pattern coming out of the nozzle.

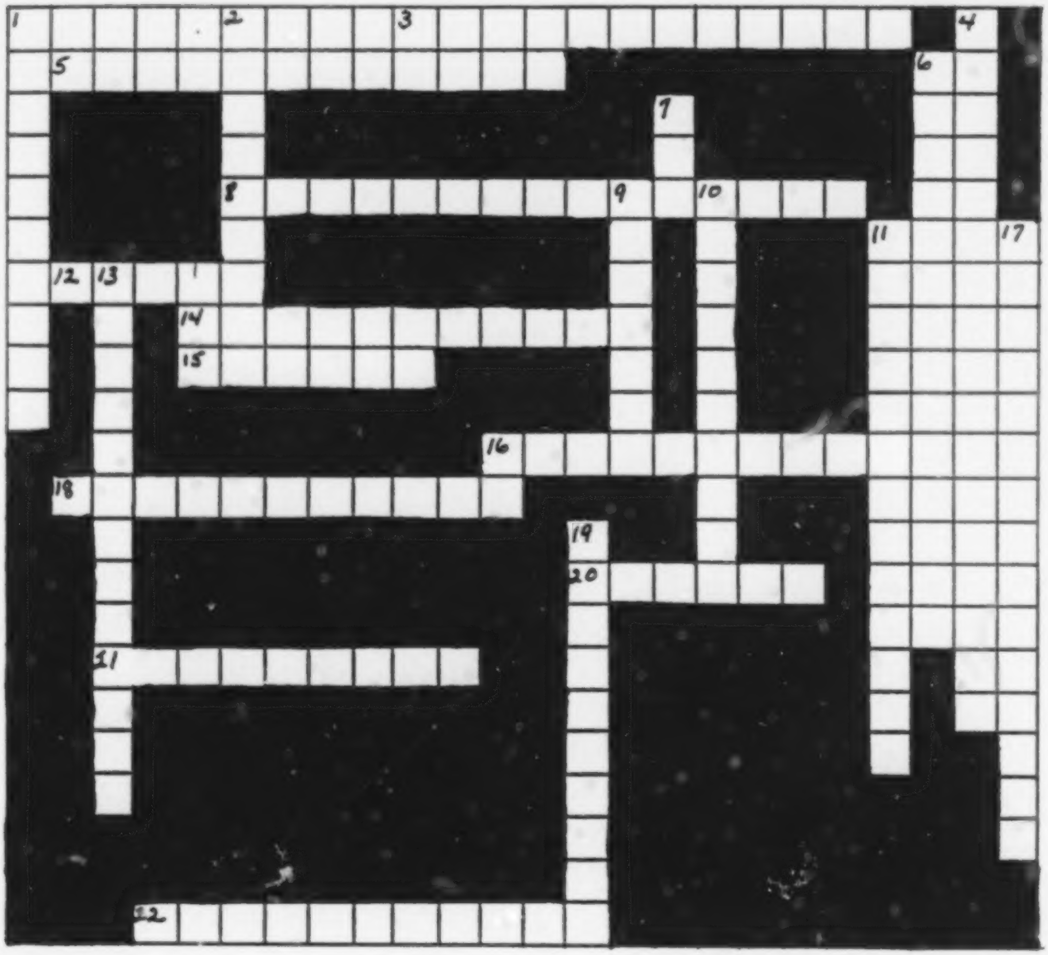
18 A device to keep wettable powder herbicide in suspension.

20 Danger or probability that injury will result from the use of a substance in a given quantity and manner.

21 Device which delivers the spray material at constant pressure and capacity for a long l period of time.

22 Line which pulls the spray solution out of tank.

AGRICULTURAL CHEMICAL CROSSWORD PUZZLE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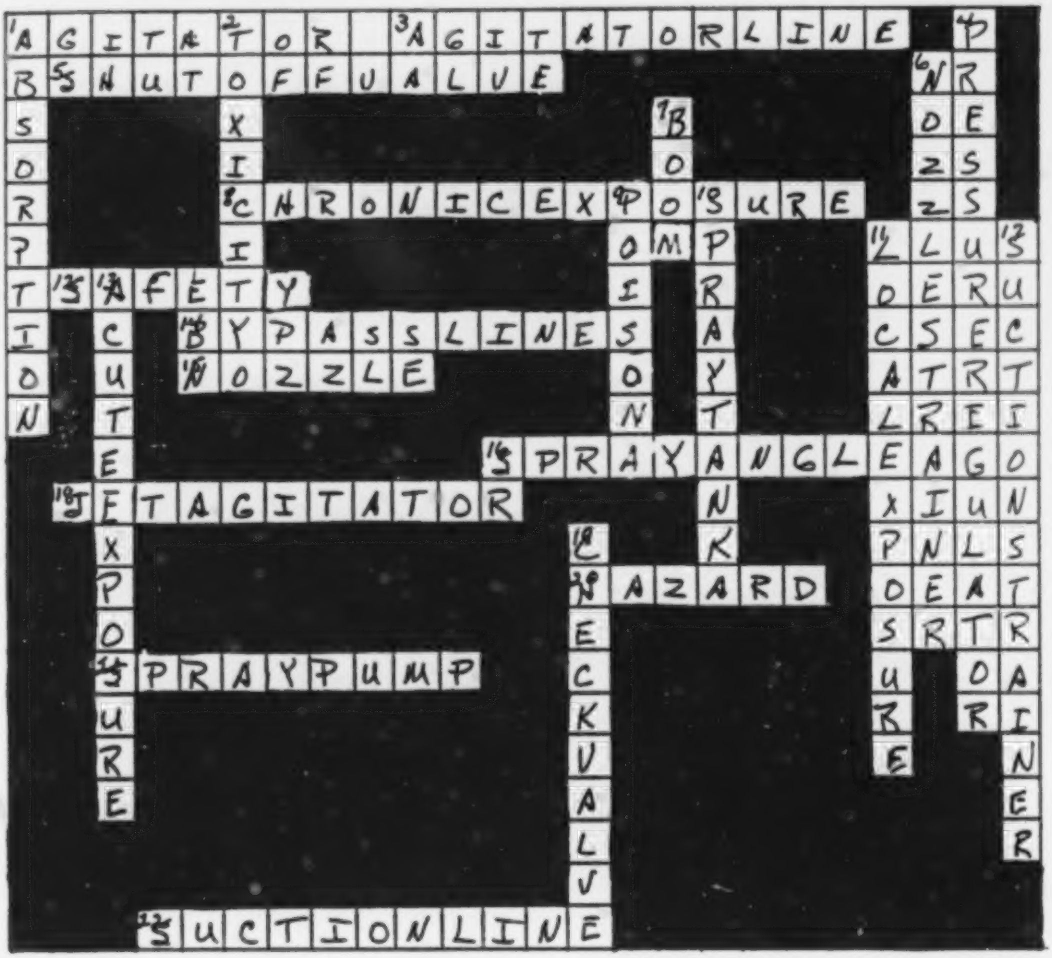
AGRICULTURAL CHEMICAL CROSSWORK PUZZLE KEY


1 AGITATOR
3 AGITATORLINE
5 SHUTOFFVALVE
8 CHRONICEXPOSURE
13 SAFETY
14 BYPASSLINES
16 NOZZLE
15 SPRAYANGLE
18 JETAGITATOR
20 HAZARD
19 SPRAYPUMP
22 SUCTIONLINE
1 ABSORPTION
2 TOXICIT
4 PRESSUREREGULATOR
6 NOZZLESTRAINER
7 BOOM
9 POISON
10 SPRAYTANK
11 LOCALEXPOSURE
12 SUCTIONSTRAINER
17 ACUTEEXPOSURE
18 CHECKVALVE

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Types of Chemicals

Pesticides

- Insecticides
- Fungicides
- Herbicides
- Pesticides

Plant regulators

Defoliants

Dessicants

Herbicide Formulations

Water-soluble concentrates

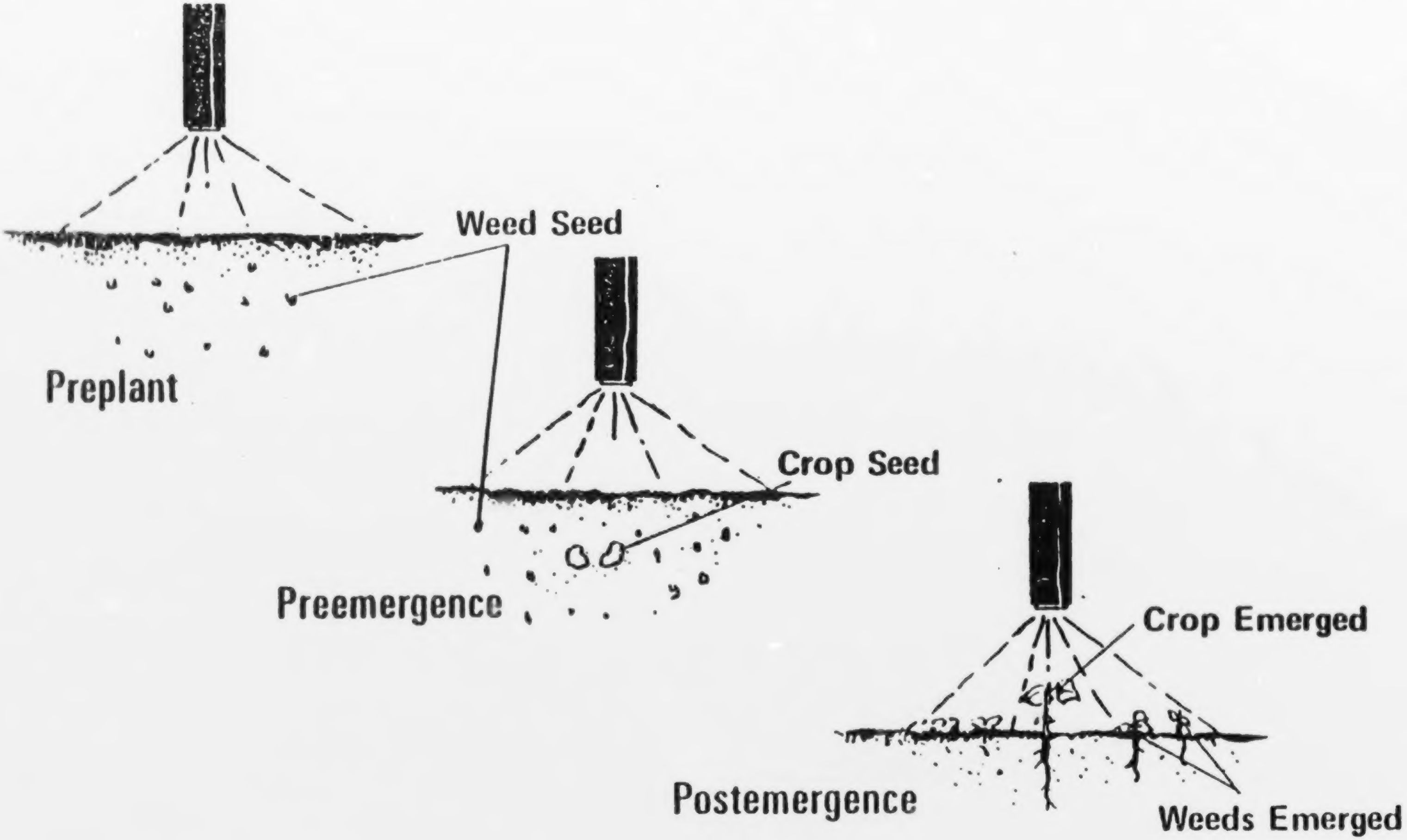
Emulsifiable concentrates

Flowables

Wettable powders

Granules and pellets

HERBICIDE CLASSIFICATIONS



Weed Seed

Preplant

Crop Seed

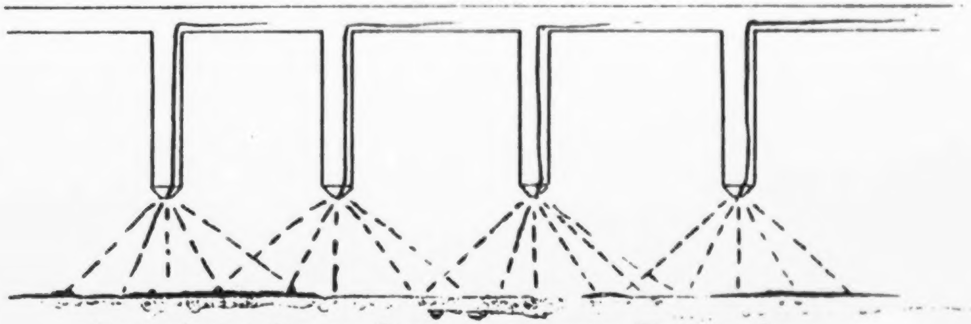
Preemergence

Crop Emerged

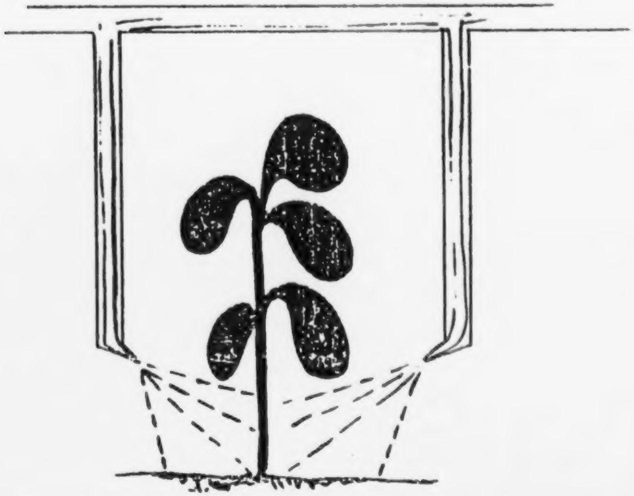
Postemergence

Weeds Emerged

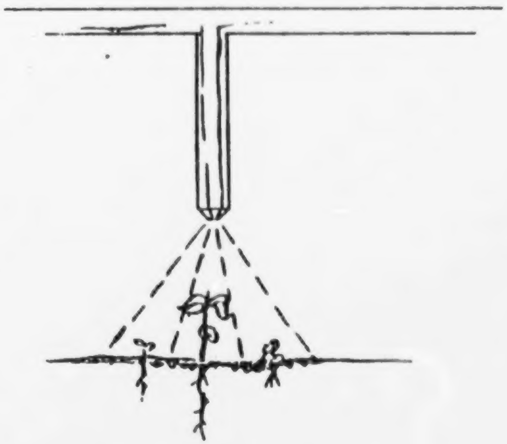
Application of Herbicides



Broadcast Spray Pattern Covers Entire Area



Directed Spray Beneath Plant Leaves



Band Spray Pattern
Over the Row

972

973

Application Rates Determined by:

Climate

- Temperature
- Wind
- Moisture

State of Plant Growth

- Condition of plant
- Texture of soil
- Organic matter in soil
- Size and condition of crops
- Size and condition of weeds
- Available moisture
- Height of spray boom

PROBLEM AREA 7

HOW SHOULD A MANAGER SUPERVISE AND MAINTAIN A GOOD RELATIONSHIP WITH HIS/HER EMPLOYEES?

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ACT-7 A Management Case Study 17

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TM-9 Correcting an Employee's Behavior 20

ACT-10 Employee Evaluation 21

PROBLEM 3: How should a manager supervise and maintain a good relationship with his/her employees?

INTEREST APPROACH:

Mr. Jones is the manager of a Farm Sales and Supply Service and has 30 employees working for him. Mr. Jones likes to have things done right and on time. How can Mr. Jones supervise his employees in a way which will allow him to get things done and still maintain good relations with his employees?

STUDY QUESTIONS:

1. What are the two types of management styles?
2. What are characteristics of a good supervisor?
3. How should you evaluate employee performance?
4. What criteria should you use to evaluate employees?
5. How should you correct improper employee behavior?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

To be able to identify characteristics of a good supervisor. Student Learning Activity #1.

To identify good work habits. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the student learning activities.

List good work habits which you should follow. Student Learning Activity #1.

Give and accept proper criticism and praise to improve your job environment. Student Learning Activity #3.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

To evaluate their skills to determine their supervisor capabilities. Student Learning Activity #2.

To consider in evaluating an employee's work and his/her job performance. Student Learning Activity #3.

STUDENT LEARNING ACTIVITIES:

1. Discuss the two types of managers (TM-1). Have students identify qualities of a good manager and a good supervisor, then discuss TM-2, 3 and 4.
2. Have students evaluate their ability to be effective supervisors using ACT-5 and 6. Utilize the case study (ACT-7) to identify methods of handling employee problems.
3. Review and discuss TM-8 and 9. Evaluate the sample employees in ACT-10 and provide recommendations on how you would supervise that person.

CONCLUSION:

Two types of management styles.

Type X:

Believes the average worker dislikes work and will avoid it if possible.

People must be forced into getting the job done and must be strictly controlled.

The autocratic manager orders forcefully and if necessary threatens employees.

Type Y:

Believes that people are willing to work hard and exercise self discipline if they feel that the objectives are worthy.

The democratic manager gives orders to the employee but allows the employee to make decisions on how to get the job done.

Usually the most effective management style consists of some combination of the autocratic style and the democratic style. Use the one that best suits your personality and business needs. However in order to develop a loyal and productive employee over time, it is necessary to exercise some democratic principles.

Characteristics of a good supervisor.

Emphasize skills, not rules.

Sets high standards for yourself and your subordinates.

Knows your subordinates and try to determine what is important to each one.

Listens thoughtfully and objectively.

Is considerate and courteous

Is consistent in behavior and mood

Gives directions in terms of suggestions or requests.

Delegates responsibility to subordinates when appropriate.

Has faith in employees and show them that you expect the best.

Keeps employees informed about the business.

Asks employees for their suggestions and ideas-then listen carefully.

Gives employees, when possible, a chance to take part in decisions.

Makes employees feel important and valued.

Informs subordinates of their progress or lack of progress in a positive way.

Offers constructive criticism in private.

Praises employees in public.

Sets a good example for subordinates.

Is able to accept constructive criticism.

Is understanding with employee problems.

Allows employees freedom when it produces positive results.

Evaluating employee performance

Steps for an employee development evaluation

Schedule a meeting

Review task list

Discuss task importance

Give employee feedback

Listen and answer questions

Respond to problems

Set goals

Reaffirm positive feedback

Thank employee

Criteria to evaluate employees:

Accuracy of work.

Attitude toward co-workers.

Attitude toward superiors.

Cleanliness.

Manner in which tools and equipment are handled.

Initiative.

Attendance or days spent at work.

Giving advance notice of absence from work

Ability to make decisions

Use of good judgement

Correcting an employee's behavior:

Don't damage the employee's self esteem

Don't forget to focus on the behavior-not on the person.

Don't save up problems and dump them all at once. Deal with them one at a time.

Don't forget what it's like to be in the person's position. Be fair, respectful, specific and firm.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify the two types of management styles.

List at least 10 characteristics of a good supervisor.

Identify 10 criteria to evaluate employee performance.

Follow a correct procedure for correcting an employee's behavior.

OPTIONAL LEARNING ACTIVITIES:

1. Set up a role playing situation where an employee has been identified as having poor work habits. Select one student to serve as the employee and another student to serve as the supervisor who must try and correct the problem.

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Business Management and Ownership. State Department of Vocational and Technical Education, Stillwater Oklahoma. 1982.

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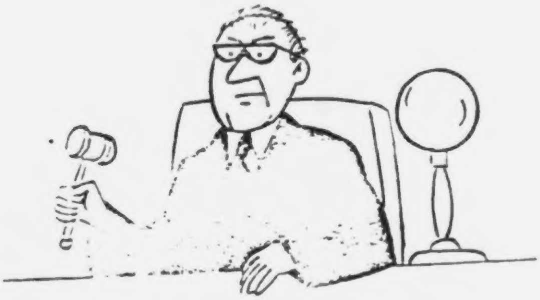
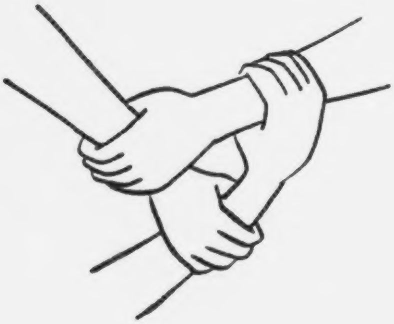
Two Types of Managers



Theory X Manager

1. Believes the average worker dislikes work and will avoid it if possible.
2. People must be forced into getting the job done and must be strictly controlled.
3. The autocratic manager orders forcefully and if necessary threatens employees.



Theory Y Manager

1. Believes that people are willing to work hard and exercise self discipline if they feel that the objectives are worthy.
2. The democratic manager gives orders to the employee but allows the employee to make decisions on how to get the job done.

Characteristics of a Good Supervisor

1. Emphasize skills not rules.
2. Set high standards for yourself and your employees.
3. Know your employees and try and determine what is important to each one of them.
4. Listen thoughtfully and objectively.
5. Be considerate and courteous.
6. Be consistent in your behavior and mood.
7. Give directions in terms of suggestions or requests
8. Delegate responsibility to employees when appropriate.
9. Have faith in your employees and show them that you expect the best.
10. Keep your employees informed about the business.
11. Ask employees for their suggestions and ideas - and then listen carefully.
12. Give employees, when possible, the chance to take part in decisions.
13. Make your employees feel important and valued.
14. Inform your employees of their progress or lack of progress in a positive way.
15. Offer constructive criticism in private.
16. Praise your employees in public.
17. Set a good example for your employees
18. Be able to accept constructive criticism yourself.
19. Be understanding with employee problems.
20. Allow employees freedom when it produces positive results.

Implications for Managers

- ✱ Motivation does not mean doing things to or for people. It involves mixing (combining) the organization's goals together with the individual's desires and needs.

- ✱ Motivation... is in the eye of the beholder. One person's joy is another person's poison.

- ✱ Managers must look for constants (likenesses) in the workforce but provide for personal differences of each employee.

- ✱ People are not elevators with hot buttons. There is no laundry list of satisfiers that can be matched with a list of needs.

- ✱ The most realistic and most effective motivator is the job itself. Salary increases are less effective than the personal feeling of the employee that his or her job or work is making a valued contribution to the organization and that this job is satisfying personal goals.

Implications for Managers

(Continued)

- Workers want to satisfy a range of needs rather than satisfy one or two. Managers must provide for job enlargement and job enrichment.

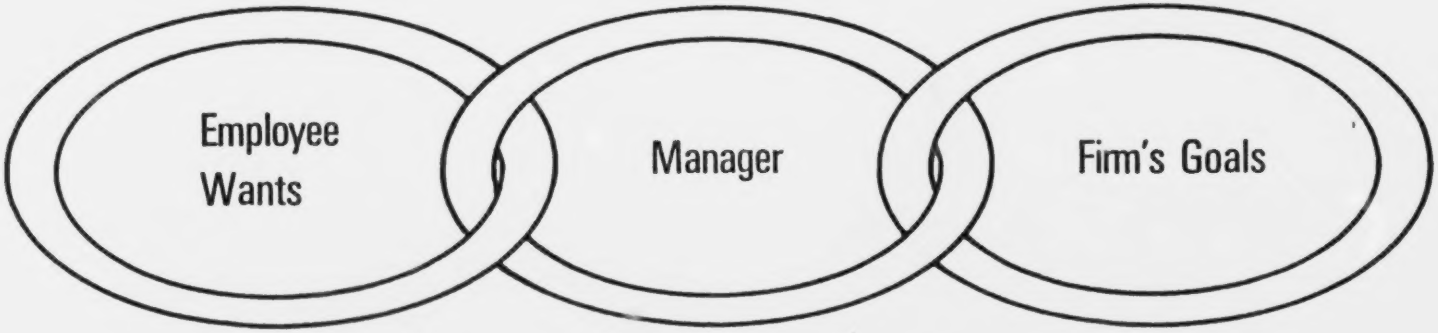
- Employees are motivated when managers compliment good performance and express positive attitudes.

- There is no need to dissect employees. No manager has the right to psychoanalyze employees.

- An experimental approach is a must. Be an understanding friend; observe performance and measure the results; select technique for improvement; implement your plan, adapt or modify as you continue to observe performance and measure results.

- Best way to influence the thinking of others is to be open to others' ideas. Allow employees to influence (motivate) you. Whenever they see that their ideas are valued, they will begin to value management's recommendations.

Linking Employee Wants to Firm's Goals



Employee Wants

Manager

Firm's Goals

Interesting Work ---------- Coordinates ---------- Congenial Work Group

Appreciation of Work ---------- Communicates ---------- Loyalty/Productivity

Opportunity to Advance ---------- Integrates ---------- Staff Development

Job Security ---------- Adapts ---------- Profits/Growth

Representation ---------- Collaborates ---------- Policies/Contacts

PERSONAL SUPERVISOR EVALUATION

Evaluate your potential to be a supervisor in an agricultural supply business on the grid below. The first grid is an example of how to use the grid. Mark your evaluations on the second grid and calculate your score on ACT-5b. A value of 1 is low and 10 is high. When you have completed this activity, complete your management profile on ACT-5c.

EXAMPLE:

MANAGEMENT QUALIFICATIONS											
Technical Knowledge	1	2	3	4	5	6	[✓ 7]	8	9	10	
Creative.......................	1	2	3	[✓ 4]	5	6	7	8	9	10	
Able to Communicate............	1	2	3	4	5	6	7	[✓ 8]	9	10	
Leadership Positions	1	2	3	4	5	6	7	[✓ 8]	9	10	
Pleasant Personality..............	1	2	3	4	5	[✓ 6]	7	8	9	10	
Use of Sound Judgment	1	2	3	4	[✓ 5]	6	7	8	9	10	
Able to Plan Things Out	1	2	3	4	5	[✓ 6]	7	8	9	10	
Able to Organize Things	1	2	3	[✓ 4]	5	6	7	8	9	10	
(TOTALS)				8	5	12	7	16			48

YOUR PERSONAL EVALUATION

MANAGEMENT QUALIFICATIONS											
Technical Knowledge	1	2	3	4	5	6	7	8	9	10	
Creative.......................	1	2	3	4	5	6	7	8	9	10	
Able to Communicate............	1	2	3	4	5	6	7	8	9	10	
Leadership Positions	1	2	3	4	5	6	7	8	9	10	
Pleasant Personality..............	1	2	3	4	5	6	7	8	9	10	
Use of Sound Judgment	1	2	3	4	5	6	7	8	9	10	
Able to Plan Things Out	1	2	3	4	5	6	7	8	9	10	
Able to Organize Things	1	2	3	4	5	6	7	8	9	10	
(TOTALS)											

Calculate your score for ACT-5a.

A. Multiply your "grand total" times 10

B. Divide your answer by 8

EXAMPLE:

(Grand total) 48 x 10 = 480

480 ÷ 8 = 60 (Composite score)

Calculate your composite score here

(Grand total) ____ x 10 = ____

____ ÷ 8 = ____ (Composite score)

Analyze your composite score

80 - 100	You have real potential as a manager. Build on it.
60 - 80	You have average management qualifications. You should do all right, but there is certainly room for improvement.
40 - 60	Your personal management qualifications are weak. Be sure to ask for help when you feel it is needed.
Below 40	You will probably encounter a great deal of trouble in handling a management position. Think twice before you accept the position. Work on improving your skills first.

A. Do you agree with the scale given in PART IV?______________________________

Why or why not?____

____

____

____

____

____

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____

MANAGEMENT SKILLS PROFILE

NAME__________________________________ SCORE _______________

Productivity is the nation's number one problem. Before managers can deal with the problem of how to increase the productivity of others, they must assess their own performance objectively. In this assignment you will be given the opportunity to assess *your* management abilities by rating yourself on the statements within a management skills profile. Use the scale of 1-10 as indicated below to complete the assignment.

Definite weakness. 1-4
Average. 5-7
Definite strength. 8-10

PART I--Rating scale

Circle the appropriate number to indicate your personal rating in each of the management qualifications.

Management Qualifications	RATING SCALE									
	WEAK				AVERAGE			STRONG		
Technical Knowledge	1	2	3	4	5	6	7	8	9	10
Previous Work Experience. . .	1	2	3	4	5	6	7	8	9	10
Intelligent	1	2	3	4	5	6	7	8	9	10
Creative.	1	2	3	4	5	6	7	8	9	10
Resourceful.	1	2	3	4	5	6	7	8	9	10
Able to Communicate	1	2	3	4	5	6	7	8	9	10
Proficient in Math	1	2	3	4	5	6	7	8	9	10
Leadership Positions	1	2	3	4	5	6	7	8	9	10
Pleasant Personality.	1	2	3	4	5	6	7	8	9	10
Use of Sound Judgment	1	2	3	4	5	6	7	8	9	10
Able to Think Things Through	1	2	3	4	5	6	7	8	9	10
Hard Working	1	2	3	4	5	6	7	8	9	10
Healthy.	1	2	3	4	5	6	7	8	9	10
Determined to Succeed	1	2	3	4	5	6	7	8	9	10
Honest.	1	2	3	4	5	6	7	8	9	10
Able to Plan Things Out	1	2	3	4	5	6	7	8	9	10
Able to Organize Things	1	2	3	4	5	6	7	8	9	10
Responsible for Own Actions	1	2	3	4	5	6	7	8	9	10
Able to Listen to Others	1	2	3	4	5	6	7	8	9	10
Willing to Take Risks.	1	2	3	4	5	6	7	8	9	10

DISTINGUISHING BETWEEN DESIRABLE AND UNDESIRABLE SUPERVISORY TRAITS

NAME________________________________ SCORE ______________

Managers at the supervisory level spend most of their time dealing in daily operations with employees. For this reason, it is important for all supervisory managers to develop desirable human relations practices. In this assignment, you will be required to determine which of the practices listed are desirable supervisory traits and which are undesirable supervisory traits. Place an "X" in the appropriate column below.

TRAIT	Desirable	Undesirable
A. Become anxious about getting the job done	____________	____________
B. Criticize constructively	____________	____________
C. Ignore suggestions	____________	____________
D. Assume authority that has not been given	____________	____________
E. Consider the feelings of others	____________	____________
F. Show genuine concern for others	____________	____________
G. Criticize privately	____________	____________
H. Give praise in public	____________	____________
I. Be willing to assume responsibility	____________	____________
J. Give up when the going gets tough	____________	____________
K. Arrive to work on time	____________	____________
L. Change company rules to meet your needs	____________	____________
M. Be open-minded and progressive	____________	____________
N. Show loyalty to the company	____________	____________
O. Procrastinate when meeting report deadlines	____________	____________

A MANAGEMENT CASE STUDY

NAME ______________________________ SCORE ______________

Managers are faced with problems every day. A good manager is able to identify those problems and work them through to effective solutions. There is no guarantee that the decision made will be the right one every time; however, managers are less likely to make impulsive judgments if they use an established decision-making process. Read the situation given below and complete the steps of the decision-making process.

PART I--CASE STUDY

Your best salesperson and most promising future management trainee has become consistently tardy. About two weeks ago you visited with the employee, and she explained that she was having trouble trying to get everything done each morning before coming to work. Since she lost her husband, and since school had begun, it has been increasingly difficult for her to get to work on time. Although she is to report to work at 7:30 a.m., she is generally 15-20 minutes late each morning. Although she has been frequently tardy, she is a hard worker, and her total work performance far exceeds all other employees.

Last Tuesday, the freight truck arrived with an extra large shipment for your store. Your promising employee was 45 minutes late. This meant that the truck driver and other employees had to work feverishly to get the truck unloaded before customers began to enter the store. She explained that her youngest child was ill with the flu all night and she was late getting around that morning.

Although she faces real personal/family problems and has been able to explain the causes for her tardiness, other employees think that she is receiving preferential treatment. Tension within the work group has continued to build since the truck-unloading incident last week. This situation requires your immediate attention.

ANALYSIS--How would you react if you were the department manager?

A. Identify the real problem.

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B. Gather information.

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C. List possible solutions.

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D. Evaluate probable results of each solution.

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E. Decide on the best solution.

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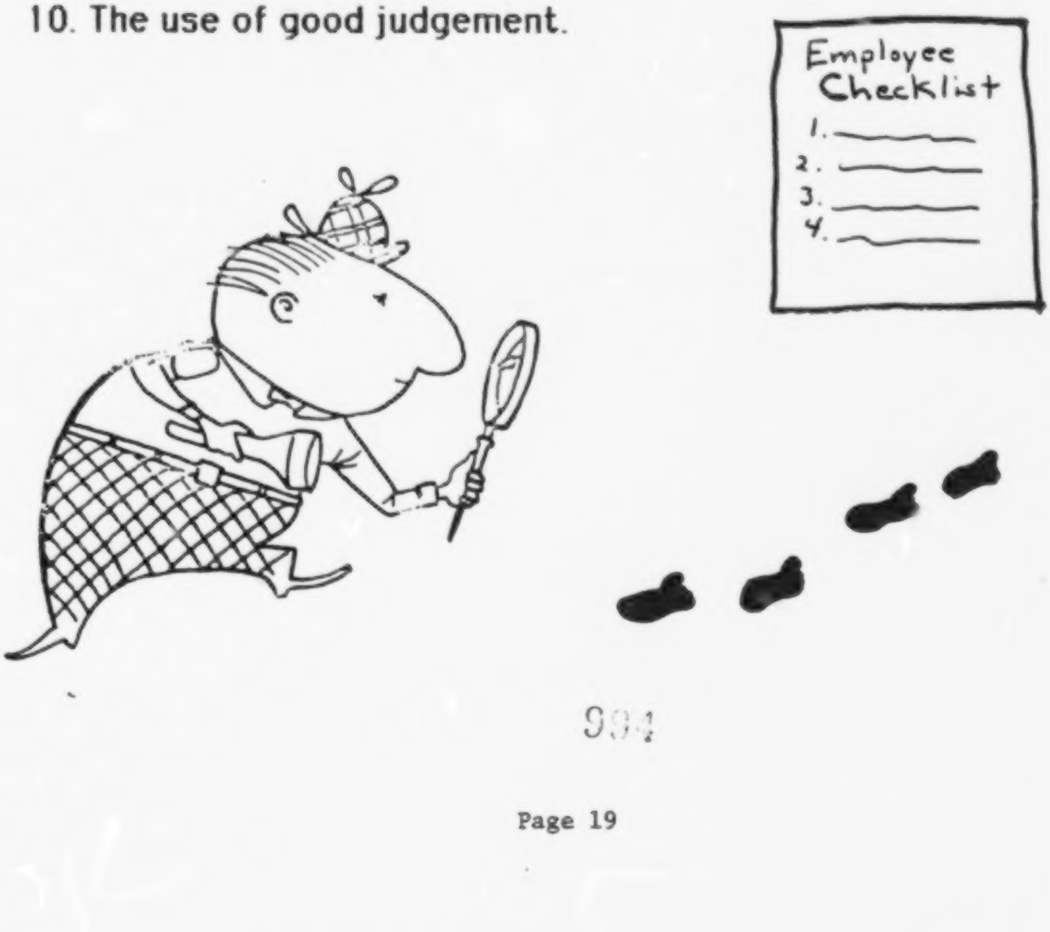
Criteria for Evaluating Employees

1. Accuracy of work.
2. Attitude toward co-workers
3. Attitude toward supervisors
4. Cleanliness
5. Manner in which tools and equipment are handled.
6. Initiative.
7. Attendance and days spent at work.
8. Giving advance notice of absence from work.
9. Ability to make decisions.
10. The use of good judgement.



Correcting an Employee's Behavior

Don't damage the employee's self esteem.

Don't forget to focus on the behavior - not on the person.

Don't save up on problems and dump them all at once.
Deal with them one at a time.

Don't forget what it's like to be in the person's position.

Be Fair, Respectful, Specific and Firm.

Employee Evaluation

One of the responsibilities of the manager is to evaluate employee performance and provide feedback to the employee on their progress. Listed below are four examples of employees in your business. Describe the process you would use to evaluate each of the employees.

Bob Jones - Bob is in charge of sales and has been employed in your business for the last 5 years. Bob's primary responsibilities include opening the supply store each morning, greeting customers as they enter the supply store and provide assistance to the customers when they need help. Bob is a very dependable employee and has been very successful in maintaining the attractiveness of the store and maintaining sales. For the last six months, Bob as opened the store 15-20 minutes late. A few customers have complained about this inconvenience. How would you deal with this situation with Bob?

Mary Jacobs - Mary's job responsibility is to contact potential customers on the phone and with personal meetings. Mary has been employed for only six months, she has been very successful in contacting potential employees and increasing fertilizer sales. As a new employee, she has been the most successful sales employee which you have ever hired. How should you evaluate Mary's work?

Tom Smith - Tom is a junior in high school and is working part-time as a warehouse worker in your business. Tom's current responsibility is to keep the warehouse clean, load customer purchases, and unload supply trucks when they arrive at the warehouse. Tom has been employed in your business since his freshmen year. He is interested in working in sales and eventually becoming a manager of a crop service business someday. Tom has been an excellent warehouse employee for the last two years, but lately he has been late to work and appears unmotivated to get assigned work completed. How should you evaluate Tom's performance?

Sally Miller - Sally is in charge of accounting and keeping all the sales records for your business. Sally has been employed in your business for the last 4 years and her work has been marginal. She is late in getting the cash flow statements completed and becomes defensive if she is questioned about her work. How should you evaluate Sally?

PROBLEM 8

HOW IS A NEW CROP SERVICE AND SALES BUSINESS FINANCED?

Contents

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TM-2 A Business Plan Includes.......................................10
TM-3 Operating Expenses..11
TM-4 Projected Profit and Loss Statement....................12
TM-5 Sales and Expense Forecast Report......................13

PROBLEM 8: How is a new crop service and sales business financed?

INTEREST APPROACH:

John Johnson is interested in starting his own crop sales and service business. John is married and has three young children to consider when making plans for his new purchase. John has been an employee for ten years as a manager for a large chemical company and is very well qualified to operate his own business. John's salary and benefits at his current job totaled $26,000/year. What are some factors John must consider before purchasing his new business?

STUDY QUESTIONS:

1. What is a business financial plan?
2. What are start-up costs when purchasing a business?
3. What are examples of operating costs?
4. How will my personal expenses affect my business?
5. Where should the money be obtained to start your business?
6. What financial statements should be included in a business plan?

LEARNER NEEDS:

Many student needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the student learning activities.

Understand the purpose and recognize the need for a business financial plan. Student Learning Activity #1 and #3.

Understand the costs involved in starting a new business. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the student learning activities.

Understand the need to plan major financial decisions. Student Learning Activity #1 and #3.

Understand the cost involved in starting a new business and its effect on one's personal income. Student Learning Activity #2.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the student learning activities.

Anticipate future costs and investments for a new business and its effect on one's family. Student Learning Activities #1 and 3.

STUDENT LEARNING ACTIVITIES:

1. Discuss the importance of a business financial plan (TM-1 and 2). Invite a loan officer from your local bank to discuss criteria required to obtain a loan for starting a new business. Have the loan officer share and discuss with the class profit/loss statements, cash flow statements, and balance sheets that he/she uses in his/her business.

2. Discuss the importance of determining personal costs, start-up costs, and operating costs when deciding to start a business (TM-3 and 4). Have students keep a record of the amount of money they spend in one week on personal items. Students should consider the cost of renting a place to live, buying food, cost of gas and repairs for their car, and entertainment. Summarize and discuss the students lists in class. Relate how these expenditures would affect costs in a crop sales and service business.

3. Obtain several financial statements from your local bank to demonstrate to the students the forms which must be completed to obtain a loan. Set up a new-business situation for the class to develop a plan that would start up the business using information studied in Learning Activity 1 and 2).

CONCLUSIONS:

Purpose of a business financial plan.

A business plan is required to help lenders decide whether it is safe to lend money to you to start a new business.

The business plan should include:

Projected profit/loss statement

Cash flow statement

Balance sheet

Start-up Costs

Expenses that will occur when you first get your business off the ground.

Examples: Fixtures and equipment

- Starting inventory
- Deposits for rent and utilities
- Business license and permits
- Certian legal fees
- Advertising for a grand opening

Operating expenses.

The money which will be required to get the business on its feet. Many businesses will take a year or longer to begin to show a profit. Until there is enough profit to keep the business running, money will be needed for operating expenses.

Examples include:

- Inventory
- Supplies
- Advertising
- Payroll
- Taxes
- Repairs for equipment

Insurance

Monthly rent

Utilities

It is essential to determine how much money is needed each month to operate the business.

Personal expenses and the affect your business operation.

Personal Expenses - are those costs that are necessary for you to live. The money you need to start and operate the business is important. Don't overlook the money that you need for personal or living expenses.

Examples:

Rent or mortgage

Food

Transportation

Insurance

Clothing

Utilities

Medical bills

Entertainment

Family needs

Many new businesses may not be profitable right away. Sometimes it may take 1-3 years for a business to become profitable. The owner of new business may need another source of income to pay for personal expenses during this time period.

Money to start your new business.

Two sources:

Equity financing - people who start a business put in their own money.

Debt financing - the remaining money needed to finance your business is borrowed.

Sources of equity financing:

Family

Friends

Key points to consider:

Family members may want to get involved in operating the business.

What happens if the business doesn't succeed? Will it ruin your relationship?

Financing statements included in the business plan.

Three financial statements required

Profit loss statement

Cash flow statement

Balance sheet

Profit Loss Statement - compares costs and expenses to income. It shows a profit or loss for a particular time period.

When you start your business you will not have a real profit/loss so you must estimate one.

Estimations will include:

Projected total sales

Cost of goods sold

Gross profit

Operating expenses

Net profit

Cash flow statement - Estimates how much money will come into and go out of your business each month. It tells you when you will need to find additional funds and when you will have cash left over.

Balance Sheet - The balance sheet will show how much money the business will have at the end of the year. It balances the assets of the business with the liabilities and equity.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify three components of a good financial plan.

Estimate the costs involved in setting up a new business.

Determine how your new business will affect your personal income.

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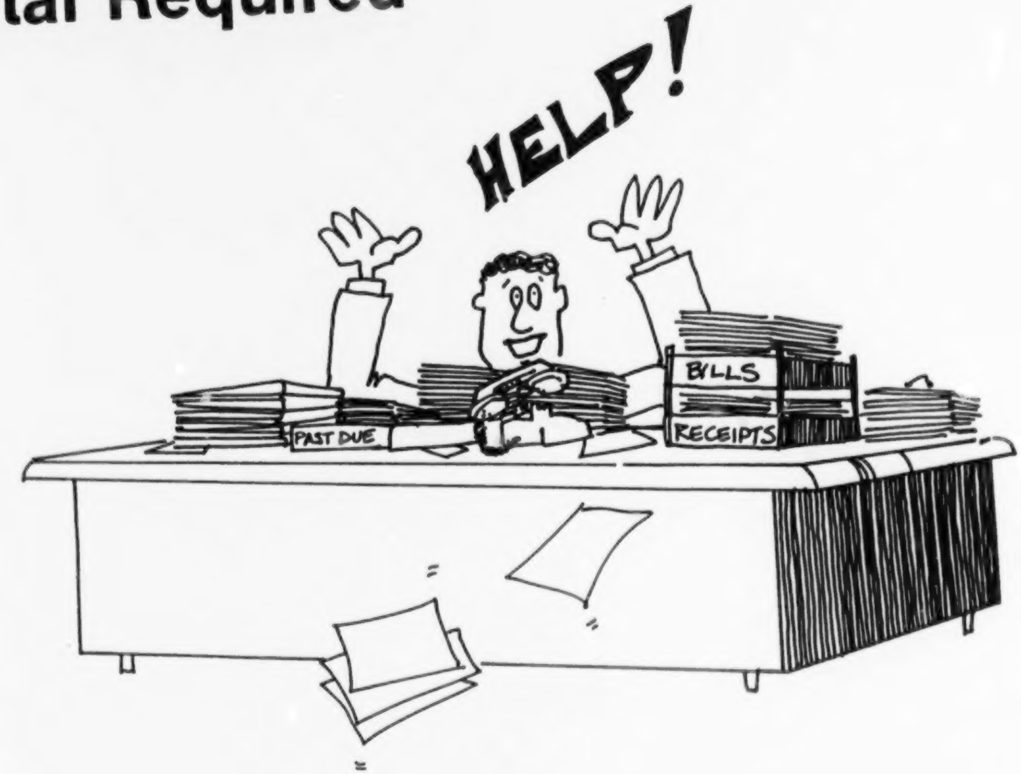
Capital Required


HELP!
BILLS
RECEIPTS
PAST DUE

A BUSINESS PLAN INCLUDES:

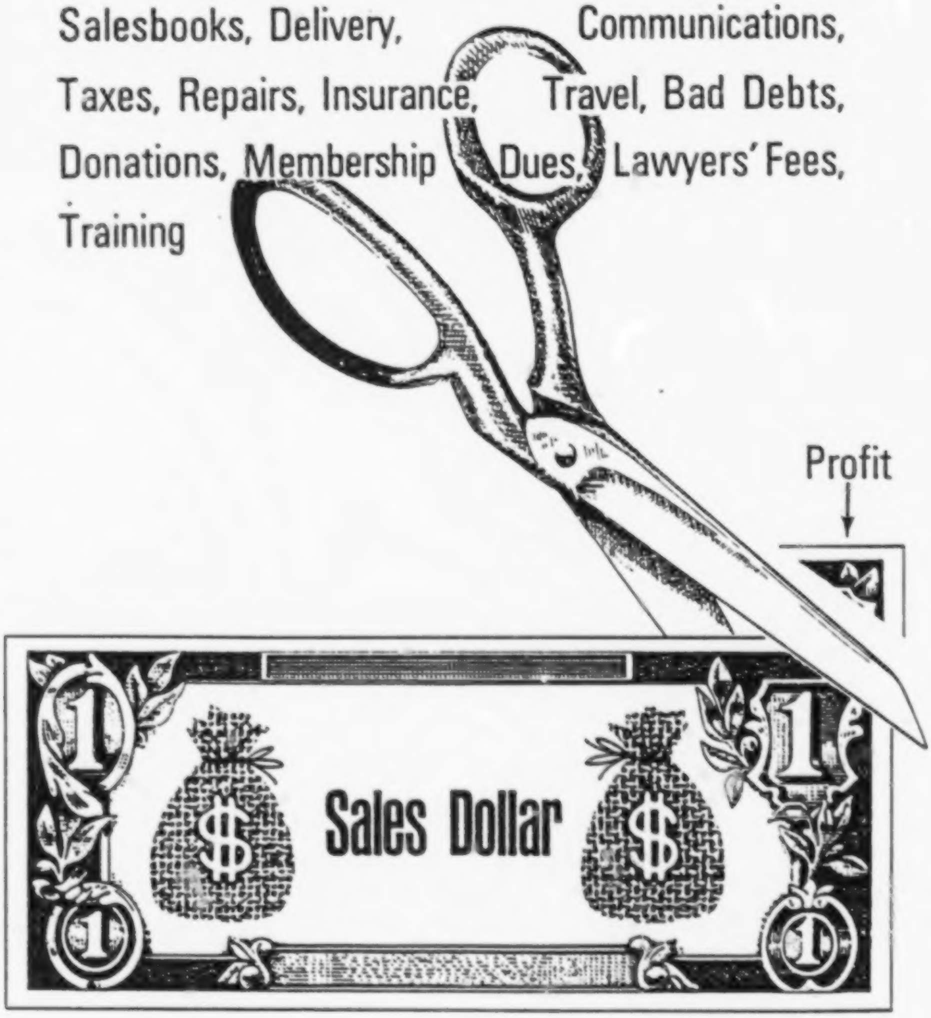
Project profit/loss statement

Cash flow statement

Balance sheet

Operating Expenses

Salaries, Advertising, Depreciation, Rent, Sacks, Salesbooks, Delivery, Communications, Taxes, Repairs, Insurance, Travel, Bad Debts, Donations, Membership Dues, Lawyers' Fees, Training


Profit
Sales Dollar
1
1
1
1
$
$

YOUR BUSINESS
PROJECTED PROFIT-AND-LOSS STATEMENT

	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
GROSS SALES	$1,000	$1,500	$1,750	$2,000	$3,000	$3,000	$3,500	$4,000	$4,500	$5,000	$6,000	$7,000
LESS COST OF SALES	750	850	900	950	1,150	1,150	1,250	1,350	1,450	1,550	1,750	1,950
GROSS PROFIT	250	650	850	1,150	1,850	1,850	2,250	2,650	3,050	3,450	4,250	5,050
EXPENSES												
SALARIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
PAYROLL TAXES	100	100	100	100	100	100	100	100	100	100	100	100
ADVERTISING	50	50	50	50	50	50	50	50	50	100	100	100
SUPPLIES	50	50	50	50	50	50	50	50	50	50	50	50
UTILITIES	100	100	100	100	100	100	100	100	100	100	100	100
AND OTHERS	200	250	300	300	350	300	350	400	400	450	450	500
TOTAL EXPENSES	1,500	1,550	1,600	1,600	1,650	1,600	1,650	1,700	1,700	1,800	1,800	1,850
NET PROFIT/(LOSS)	(1250)	(900)	(750)	(450)	200	250	600	950	1,350	1,650	2,450	3,200

Sales and Expense Forecast Report

WESTERN APPLIANCES, INC.
SALES AND EXPENSE FORECAST
JANUARY 1 TO DECEMBER 31, 1984

	1983 ACTUAL	1983 (% SALES)	1982 ACTUAL	1982 (% SALES)	INDUSTRY (% SALES)	REVISED 1984 FORECAST
Sales	$1,200,000	100.0%	$1,080,000	100.0%	100.0%	$1,400,000
Cost of Sales	960,000	80.0	880,000	81.5	81.8	1,120,000
Gross Profit	$ 240,000	20.0%	$ 200,000	18.5%	18.2%	$ 280,000
Operating Expenses						
Salary-Owner	$ 24,000	2.0%	$ 20,000	1.9%	1.7%	$ 26,000
Salary-Office Manager	17,000	1.4	16,000	1.5	(Office Sal: 4.9%)	18,000
Salaries-Salespeople	12,000	1.0	11,000	1.0	(Selling & Deliv.	12,000
Commissions-Salespeople	24,000	2.0	22,000	2.0	Expense: 7.6%)	28,000
Salaries-Warehouse	22,000	1.8	18,000	1.7		23,000
Salaries-Clerical	12,000	1.0	10,000	0.9		14,000
Payroll Taxes	9,000	0.8	8,000	0.7		10,000
Employee Benefits	8,000	0.7	6,000	0.6		9,000
Rent	9,000	0.8	9,000	0.8	0.7	10,000
Utilities	4,000	0.3	3,000	0.3		4,000
Telephone	4,000	0.3	2,000	0.2		3,000
Supplies	2,000	0.2	1,000	0.1		2,000
Advertising and Promotion	13,000	1.1	12,000	1.1		15,000
Travel and Entertainment	13,000	1.1	10,000	0.9		13,000
Freight	16,000	1.3	16,000	1.5		18,000
Professional Fees	5,000	0.4	4,000	0.4		5,000
Depreciation	6,000	0.5	5,000	0.5	0.5	8,000
Total Operating Expenses	$ 200,000	16.7%	$ 173,000	16.1%		$ 218,000
Profit Before Interest and Taxes	$ 40,000	3.3%	$ 27,000	2.6%		$ 62,000
Interest	15,000	1.3	12,000	1.1		17,000
Profit Before Income Taxes	$ 25,000	2.0%	$ 15,000	1.5%	2.5%	$ 45,000
Income Taxes	6,000	0.5	4,000	0.4		15,000
Net Profit	$ 19,000	1.5%	$ 11,000	1.1%		$ 30,000

TM-5

PROBLEM AREA 9

WHAT SHOULD AN AGRICULTURAL SALES AND SERVICE BUSINESS CONSIDER WHEN EXTENDING CREDIT TO CUSTOMERS?

Contents

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TM-3 Collection Policies......................................9

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TM-7 Customer Credit Considerations.........................13

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PROBLEM 9: What should an agricultural sales and service business consider when extending credit to customers?

INTEREST APPROACH:

Bring several credit cards to the classroom. Have students identify credits systems available and identify advantages and disadvantages to using credit for purchasing. Bring several credit cards to the classroom and discuss their use.

STUDY QUESTIONS:

1. What are the benefits of offering credit to customers?
2. What are basic credit policy considerations?
3. What guidelines should be used to evaluate credit applications?
4. What should be considered before granting credit?
5. How are references checked?
6. What are some different types of credit plans?

LEARNER NEEDS:

Many student learning needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the Student Learning Activities:

> The students should realize the impact that credit can have on customer purchases. Student Learning Activity #1.
>
> To understand the importance of a good credit application and references. Student Learning Activity #2.

BASIC SKILLS:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the Student Learning Activities.

To understand the importance of maintaining good credit. Student Learning Activity #1 and 2.

To understand the importance of credit to potential customers. Student Learning Activity #1.

THINKING SKILLS:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the Student Learning Activities:

To understand the convenience and possible hazards of using credit in your business. Student Learning Activity #1

STUDENT LEARNING ACTIVITIES:

1. Have students read the references on benefits of offering credit to customers. Review and discuss TM-1. Have students survey their parents to determine how and why they use credit when making purchases. Summarize the students' survey results and compare them with TM-1.

2. Discuss with students the options for granting credit and collection policies (TM-2,3, and 4). Invite a local crop sales and service business manager to speak to the class about how he extends credit and what procedures he uses to collect unpaid debts. Have him describe the procedures he uses to determine whether or not to extend credit to a customer. Compare the procedures described by the manager with TM-5, 6, 7, and 8.

3. Assume that each member of the class is wanting to buy a car for his/her personal use. The car costs $8000.

Each student has $1500 available to put down on the car. In order to buy the car, each student will need to seek financial help to pay the remaining $6500 to purchase the car and must apply for credit through the car dealer to purchase the car. Have each student complete ACT-9. Evaluate their potentials for being granted the credit (loan).

CONCLUSIONS:

Benefits for offering credit to customers.

Charge accounts create customer loyalty - People who use charge accounts generally return to the business where credit is used.

Credit customers may be less price conscious - Customers with a charge account generally do not shop around for bargains.

Credit customers generally buy more freely - Credit customers can say charge it without worrying about having enough cash on hand.

Credit may attract customers who will pay more for quality - Customers are interested in quality and service and not only in low prices.

Credit builds good will - The fact that a business has enough confidence in them to grant them credit builds their confidence in the store.

Credit helps smooth out business peaks - Cash customers spend more on pay days. Credit customers buy as they need.

Basic credit policy considerations.

Two basic policies:

Do not grant credit to anyone.

Do not grant all customers unlimited credit.

Collection policies:

Easy going collection policy - allows people to pay what they owe slowly.

Strict collection policy - payments need to be made on a strict schedule.

An easy going credit policy should depend on:

The policies of the competitors.

The extent which business depends on credit to make enough sales.

Company's ability to handle unpaid debts.

The time you available to collect the money which is owed.

Three guidelines for evaluating credit applicants:

Character

Capacity

Capital

Character - The person's sense of responsibility in meeting financial obligations. A person who has always paid bills promptly is an excellent candidate for credit

Capacity - The person's ability to earn money. The applicant has job skills to keep a steady job at an earning level high enough to meet financial obligations.

Capital - The physical and financial aspects of the applicant.

Many credit problems can be avoided through investigation and prudent judgement when giving credit to customers. Policies that are to easy-going invite many collectible accounts while overly strict policies can cause lost sales.

When granting credit:

Consider the applicants ability to pay.

Consider the applicants willingness to pay.

Decide if it will be profitable for you to extend credit on the item.

Consider the following:

Current address and previous address - check to see length of time applicant spent at current and previous address.

Employment history

Current Job

Salary and other income

Length of time on current job

Monthly obligations

Number of dependants (alimony expenses)

Bank balances

Personal assets (house, car, stocks, bonds, etc.)

Credit standing with other businesses, credit accounts.

Amount of credit desired

Checking a credit reference

Check place of employment

Bank References

Retail credit bureau

Different types of credit plans:

Honor one or more established credit cards.

Allow customers to open accounts with you and grant them credit directly.

EVALUATION:

Upon completion of this lesson, students will be able to:

Identify benefits of offering credit to customers.

Understand basic credit card policies.

Evaluate credit applications.

Understand how credit references are checked.

Identify two types of credit plans.

REFERENCES:

Managing Customer Credit and Collection. The National Center for Research in Vocational Education, Ohio State University, 1960 Kenny Road, Columbus Ohio, 43210. Unit 17, Level 1,2,3. (PACE). Program for Acquiring Competence in Entrepreneurship, 1983.

Benefits for Offering Credit to Customers

Creates customer loyalty

Customers are less price conscious

Customers buy more freely

Attracts customers who will pay more for quality

Builds good will

Smooths out business peaks

OPTIONS TO GRANTING CREDIT

- Do not grant credit
- Do not grant credit to all customers
- Grant credit to everyone who wants it

Collection Policies

Allow customers to pay slowly

Require customers to pay on a strict schedule

An Easy Going Credit Policy Depends On:

- Policies of competitors
- Extent business depends on credit to generate sales
- Ability of company to handle unpaid debts
- Time available to collect unpaid debts

When Evaluating Credit Applicants, Consider:

Character

Capacity

Capital

When Granting Credit:

Consider applicants ability to pay

____

Consider applicants willingness to pay

____

Decide the profitability of extending credit

____

Customer Credit Considerations:

- Current address
- Previous address
- Employment history
- Current job
- Salary and other income
- Length of time on current job
- Monthly obligations
- Number of dependents
- Bank balance
- Personal assets
- Credit standing
- Amount of credit desired

When Checking a Credit Reference:

Check place of employment

Check bank references

Check with retail credit bureau

(Closed End) **CREDIT APPLICATION** (Secured/Unsecured Credit)

IMPORTANT: Read these Directions before completing this Application.

☐ If you are applying for individual credit in your own name and are relying on your own income or assets and not the income or assets of another person as the basis for repayment of the credit requested, complete only Sections I and IV. If the requested credit is to be secured, also complete the first part of Section III, and Section V.

☐ If you are applying for joint credit with another person, complete all Sections except V, providing information in II about the joint applicant. If the requested credit is to be secured, then complete Section V

☐ If you are applying for individual credit, but are relying on income from alimony, child support, or separate maintenance or on the income or assets of another person as the basis for repayment of the credit requested, complete all Sections except V to the extent possible, providing information in II about the person on whose alimony, support or separate maintenance payments or income or assets you are relying. If the requested credit is to be secured, then complete Section V

Amount Requested $	Proceeds To Be Used For What Purpose	Account Number

SECTION I — INFORMATION REGARDING APPLICANT

Full Name (Last, First, Middle)	Telephone Number	Date of Birth	Social Security Number
Present Address (Street/City/State/Zip)		Years There	Ages of Dependents
Previous Address (Street/City/State/Zip)			Years There
Present Employer (Name and Address)		Telephone Number	Years There
Position or Title	Immediate Supervisor	Present Gross Salary $ Per	Present Net Salary $ Per
Previous Employer (Name and Address)			Years There

Checking Account Number ____________ Institution Name ____________
Savings Account Number ____________ Institution Name ____________

Have You Ever Received Credit From Us? ☐ No ☐ Yes, When?

Do You Anticipate Any Income Reported In This Section To Be Reduced Prior To The Credit Requested Being Paid Off? ☐ No ☐ Yes (Explain)

Nearest Relative (Not Living With You)	Address	Relationship	Telephone Number

Alimony, Child Support, or Separate Maintenance Need Not Be Revealed If You Do Not Wish To Have It Considered As A Basis For Repaying This Obligation.

Other Income $ Per	Sources of Other Income

SECTION II — ASSETS

If Section II Has Been Completed, Indicate All Assets And Debts of Joint Applicant By Marking A "J" Next To The Value or Present Balance.

ASSETS OWNED

DESCRIPTION	VALUE	SUBJECT TO DEBT		OWNERS NAME(S)
		YES	NO	
Cash	$			
Make, Model, Year of Automobile(s)				
Face Value and Issuer of Life Insurance Policy				
Location and Years Owned of Real Estate				
Issuer, Type and No. of Shares of Securities				
Miscellaneous Assets (Please List)				
Total Assets				

SECTION III — SECURED CREDIT (Give Brief Description of Property To Be Used As Security)

Property Description

Name and Address of Co-Owners

SIGNATURES

I/We hereby certify that the foregoing statements are true and complete to the best of my/our knowledge and that they are made for the purpose of determining my/our eligibility for credit.

I/We understand that you will retain this application whether or not it is approved. You are authorized to make any and all inquiries you deem necessary to verify the accuracy of the statements made herein.

APPLICANT'S SIGNATURE ____________ DATE ____________
APPLICANT'S SIGNATURE (If Applicable) ____________ DATE ____________

PROBLEM AREA 10

WHAT GOVERNMENT REGULATIONS AFFECT CROP SALES AND SERVICE BUSINESSES?

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TM-4 Types of State Taxes...................................10

TM-5 Types of Local Taxes...................................11

TM-6 To Obtain Help in Meeting Goverment Regulations........12

Problem 10: What government regulations affect crop sales and service businesses?

Interest Approach:

Harry Jones, manager of the Hedra Farm Supply Serive, received a letter from the state environmental protection agency. In the letter, the ERA indicated that unless he changed the way he disposed of chemical containers, he would be sued for polluting the environment. Harry always crushed his chemical containers and buried them in a pit behind his business. He had buried them in this location for the past 15 years. Harry did not realize that the pit where he was burying the disposed chemical containers was in the aquifier from which the city drew its water. Traces of agricultural chemicals were beginning to appear in the city water supply. The ERA traced the source of the pollution to the pit where Harry buried disposed chemical containers. Discuss this situation with the class. Invite a member of the ERA to class to discuss state requirements for disposing of used chemical containers.

Study Questions

1. What is the purpose of government regulations?
2. What are sources of government regulations?
3. How are regulations classified?
4. What taxes must a crop and sales business pay?
5. Where do you obtain help with government regulations?

Learner Needs:

Many student learner needs can be enhanced through instruction on this problem. The following learning skills should be emphasized through the student learning activities.

Recognize the importance of government regulations.

Student Learning Activity #1.

Basic Skills:

Many basic skills can be enhanced through instruction on this problem. The following basic skills should be emphasized through the student learning activities.

Realize the importance of government regulations and the effect they have on maintaining a healty society. Student Learning Activity #1.

Thinking Skills:

Many thinking skills can be enhanced through instruction on this problem. The following thinking skills should be emphasized through the student learning activities.

Understand the effect government regulations can have when starting a new business.

Student Learning Activities:

1. Discuss the purpose of government regulations and some of their classifications (TM-1). Invite a lawyer to the class and have him/her identify typical regulations which must be followed for operating a crop service and supply business.
2. Review and discuss TM-2,3,4, and 5. Divide the class into three groups. Assign each group one of the following: federal, state, and local. Have each group write to the appropriate agricultural agency for information on regulations and taxes that a crop sales and service business confronts. Compare the information each group receives noting the similarities and differences at each governmental level.
3. Invite a local and/or state law maker to class. Have him describe how regulations and taxes are established and enacted and how they are implemented.

Conclusions:

Purpose and source of government regulations

Regulations exist to protect everyone involved in the busienss.

Every business depends on a healthy society for its success. Attemps by the government to protect its citizens also work for us as individuals.

Laws also protect business owners against such problems as unfair competition.

Regulations concerning the operation of small businesses are made on the federal, state, county and local levels.

Federal laws apply to businesses across the country.

State and local rulings vary from state to state and from city to city.

Classification of regulations

Protection from competition

Protection for employees

Protection of the environment

Protection for consumers

License or permit

Protection from competition. The federal laws passed to encourage fair competition among businesses

Sherman Anti-trust Act

Clayton Act

Protection for employees. These laws are passed to make sure that businesses are fair in hiring and promoting employees, pay a minimum wage, and improve the safety of the work place.

Equal Employment Opportunity Act

Fair Labor Standards Act

Occupational Safety and Health Act

National Labor Relations Act

Protection of the environment. Laws to protect the environment such as decreasing air pololution, water pollution, and other parts of the environment. The Environmental Protection Agency (EPA) monitors business compliance in these areas.

The Clean Air Act

The Solid Wast Disposal Act

The Water Quality Act

The Noise Control Act

Protection of consumers. The federal government enforces laws concerning unsafe products, false advertising, and truth while using credit. It is against the law for businesses to make or sell food that has gone bad or sell drugs that have not been tested. Products must have correct labels and should not be packaged to fool customers.

Food, Drug, and Cosmetic Act.

Fair Packaging and Labeling Act.

Truth in Lending Act.

License or permit. The permission granted to operate a business.

Types of business taxes.
No matter what type of product of service is sold in the busienss, the business must pay federal, state, and

local taxes. Taxes must be paid on employees, inventory, and profits.

- Federal taxes
    - Corporate income taxes
    - Excise taxes
    - Employment taxes
    - Social security taxes
    - Stamp taxes
    - Occupational taxes
    - Customs taxes
- State taxes
    - Corporate income taxes
    - Gross receipts and sales taxes
    - Busienss real and personal property taxes
    - Capital stock taxes
    - Business automobile and truck licenses
    - Inspection taxes
    - Foreign-state business taxes
    - Workers compensation insurance premiums
    - Incorporation fees
    - Employment taxes
- Local taxes
    - Sales taxes

School taxes

County real and personal property taxes

Business licenses

Business real and personal property taxes

Help available to handle government regulations.

Obtain the advice of a good lawyer

Obtain advice from the government agencies that enforce regulations.

Evaluation:

Upon completion of this lesson, the students will be able to:

State the importance of government regulations.

Discuss how regulations are classified.

Recognize types of business taxes.

Know where to find help on government regulations.

References:

Complying with Government Regulations. Program for Acquiring Competence in Entrepreneurship, Unit 10, Level 1, 2, and 3. The National Center for Research in Vocational Education, Ohio State University, 1960 Kenny Road, Columbus, Ohio. 43210. 1983.

Government Regulations:

- Protect people in the business
- Protect citizens
- Protect owners against unfair competition
- Are made on the federal, state, county, and local level

Classification of Government Regulations:

Protection from competition

Protection for employees

Protection of the environment

Protection for consumers

License or permit

Types of Federal Taxes

Corporate income taxes

Excise taxes

Employment taxes

Stamp taxes

Occupational taxes

Customs

TM-4

Types of State Taxes

- Corporate income
- Gross receipts and sales
- Business real and personal property
- Capital stocks
- Business automobile and truck licenses
- Inspection taxes
- Foreign - state business
- Workers compensation insurance premiums
- Incorporation fees
- Employment taxes

Types of Local Taxes

- Sales
- School
- County real and personal property
- Business licenses
- Business real and personal property taxes

To obtain help in meeting government regulations:

- Obtain the advice of a good lawyer.
- Obtain advice from the government agencies that enforce regulations.